University of Alberta

Discursive Infections: A Critical Theory of Virus

by

Christopher D. Rechner ©

A thesis submitted to the Faculty of Graduate Studies and Research in partial
fulfillment of the requirements for the degree of Master of Arts

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Abstract

Contemporary popular culture is being overwhelmed by a paranoia of Virus, an apocalyptic threat that has replaced the nuclear spectre of the Cold War with an phantasmagoric, pathogenic decay of Systems. The antibiotic mission of 20th century science to eradicate disease has backfired with the accelerating emergence of drug-resistant bacteria. Virus invades the technological apparatus, causing everything from PC system-crashes to the financial crises of simulated, electronic economies. William S. Burroughs warns that Language is itself a virus; that linguistic codes operate as a control mechanism that enforces a conformist ideology of the image, a replicative semiosis that reproduces the dominant power regime. Contemporary science fiction translates Burroughs' control code into panic technology that threatens to assimilate organic life into cybernetic consciousness. Through an intertextual discussion of mass media, contemporary film (Cronenberg, Gilliam), and the 'creative' science of complexity theory, it becomes clear that, as Baudrillard suggests, postmodern systems are being consumed by a secret pathology, a cancerous semiosis that feeds off the hyperlogical consistency of standardization. The study of Virus cannot maintain a critical distance from such issues, but rather must submit itself to a pathogenic mutation, exploring the viral potentials of Burroughs' Algebra of Need from the inside out.

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Introduction: Toward a Critical Mass

As the corpse of humanism begins to dance the final steps of an apocalyptic endgame, there is a force swelling to critical amplification in the industrial jungle. During the operation to remove the tumor of nuclear holocaust from our cultural horizons, a more menacing infection has set in. Both in the secret laboratories of unnamed government agencies and in the most unpopulated depths of rainforest a terrifying organism is festering beyond control. As the mass medias move toward a single unified corporate morality, collapsing the global village into the global living room, that barely-discernable, almost *liminal* hum that resonates beneath the surface of screen has reached a pandemic frequency. As the victims of AIDS face an equally bloodthirsty foe in the form of an aristocratic middle class that views the disease as a scourge of God (against faggots and junkies)--a plague of morality that acts as secondary infection to what is essentially a techno-capitalist disease--the institutionalized gap between science and social language becomes virtually untranslatable. Virus is the conspiracy of System--a death threat delivered in scrambled code. Virus is an excercise in pattern recognition.

Language is breaking down faster than the rotted lung tissue of the "Joe Camel" culture (recent media-surveys suggest that the charismatic cigarette smoking mascot scores a higher rate of face recognition among young American children than Mickey

Mouse). Semiotic cancer is parallelled by the disintegration of print culture into digital form, the acceleration of text into *hypertext*. The terminal VELOCITY of our overpopulated, under-developing planet is prophesied in the feedback loop that reverberates through William S. Burroughs cut-up novel *Nova Express*: "Shift linguals--Free Doorways--Cut word lines--Photo falling--Word falling--Breakthrough in Grey Room--Use Partisans of all nations--*Towers, open fire*--" (Nova, 69-70). Burroughs' clipped (or, more accurately, *cut*) prose carries the same fatalistic tones of a (pre)recorded finality as does the BLACK BOX that airline disaster teams search desperately for after each new mysterious air disaster (a kind of TWA 800 logic). These boxes, lined up chronologically, would reveal the serialization of western culture's self-destructive tendency towards chaotic systems of technology--a terminal opera in the form of a terrifying radio play: Burroughs' collected writings produce the same effect within the collapsing space of the literary landscape. Burroughs is proving to be a kind of postmodern Nostradamus: a writer whose prophetic accuracy is a direct product of his understanding of language systems as viral, serial, metaphorical codes of authority and CONTROL, systems that must be infiltrated and overthrown from within. Virus doesn't live in the rainforest--it lives in language. Virus is an act of reading.

Following from Burroughs' science of fiction, writers such as Thomas Pynchon and William Gibson and critics such as Marshall McLuhan and Jean Baudrillard continue to map out the apparatus of control that operates within the 'free' play of signs that constitutes our sense environments. Recent sci-fi has become a breeding ground for a creative, counter-cultural virology that considers Virus both as form (the proliferation of chaos within seemingly natural systems) and as content (the 'bacteriophobia' of cultures stalked by infectious agents). Michael Crichton's *Andromeda Strain* (1969) emits echoes of H.G. Wells with its fictional-documentary approach to the invasion of earth by alien bacteria. Richard Preston's non-fiction work *The Hot Zone (1994)*, itself a kind of *fictionalization* of a historical infection, comments nicely on the hysteria of Crichton's popular novel, while offering a contemporary rewriting of plague documentary in the tradition of Defoe. Frank Herbert, another very commercially successful sci-fi writer (his Dune series were automatic best-sellers), in *The White Plague* (1982), presents a *politicization of virus*, and, in the aftermath of world-wide infection, a corresponding *viralization of politics*. Taking a theoretical hand from the critical strategies of Jameson, McLuhan, and Baudrillard, the goal of a critical discussion of virus must not be linear definition, but rather an opening up of the critical process to see patterns happening in an *intertextual* dimension. Popular films, television advertising, video games, and comic books often provide a mirror of surreal clarity, or *hyperrreality*, in which to contemplate the depths and surfaces of a terminal print culture.

That eternal electronic voice of *static* is the voice of Virus, a whisper that disguises a roar. Virus, like the hypnotic buzz of consciousness, is, by definition, moving too fast to be isolated for clinical study. Manfred Eigen describes the reproduction of virus through time and space as a reflexive evolution: "Viral Replication takes the form of a hyper cycle, a set of interlocking feedback loops that describes a coevolution within a cell of the viral genes and the viral proteins essential to replication" (46). Information and energy are wed at the cellular level to transform a combustion engine into a nucleur reactor; the resulting fission carries a lethal threat that makes Chernobyl look like a gas barbecue. As the pattern of Virus replicates exponentially in the non-geographical spaces of electronic culture, the hands of an already overworked doomsday clock are bent in new and unimaginable directions. But Virus is not confined to the merely biological or technological world; Virus spreads most effectively at the level of ideology, a cancer of consciousness that moves along word lines and image tracks.The western media machine is a satellite-equipped virus processor that transmits the information codes of cultural reality across a schizophrenic bandwidth. The influence of avant-garde art movements on contemporary televisual imagery--the Dali-ization of western culture through mainstream appropriation--may seem a 'dumbing down' of high culture but is in fact the smartening up of mass culture--a problematic expansion that reeks of viral hegemony. As surrealism, cubism, even DADA are swallowed up by a culture machine that is born to inbreed, the fantastic images of anti-art moved from experimental aesthetic perception, through LSD, into pop-art, formatted to the screen and out into the living room where the Nielsen Family watches Dali's eternal return in prime-time advertising. Jean Baudrillard, in his apocalyptic travelogue *America*, writes:

> Today's Eternal Return is that of the infinitely small, the fractal, the obsessive repetition of things on a microscopic and inhuman scale. It is not the exaltation of a will, nor the sovereign affirmation of an event, nor its consecration by an immutable sign, such as Nietzsche sought, but the *viral recurrence of microprocesses*"
>
> (America, 72, emphasis mine).

Baudrillard's claim should read "viral recurrence *is* microprocess" writ large. In the age of fast food and microwave dinners, the fact that the shopping channel is only a microclick away from the cartoon channel seems to me a surrealist dream come true. Greil Marcus, in *Lipstick Traces: A Secret History of the Twentieth Century*, suggests that subcultures are historical mutations of an original, and highly contagious avant-garde aesthetic. Marcus writes, "it seems to me that the Lettrist International... was itself a bomb, unnoticed in its own time, which would explode decades later as [the Sex Pistols songs] 'Anarchy in the UK' and 'Holidays in the Sun.'" (Marcus, 22). Marcus digs deeply into the connections between dada, surrealism, futurism, LI, Situationists Internationale (SI), and punk rock as personified by the London scene of the mid-1970's. Marcus' argument can be extended to the pure prankishness of the contemporary hacker--Gibson's computer cowboys, jacked into a viral cyberspace, are the pioneers of a techno-cultural medium that finds its roots in the disruptive logic of the avant-garde. The roots of Aesthetic anarchy have covered themselves well and yet the viral connections can still be traced. Take for example *The Simpsons*, a prime-time parody of what happens when the situationists run the sit-coms.

Virus is communicated through art both in the sense of a reflexive and digestive aesthetic consciousness (the eternal return of the avant-garde) as well as in the sense of its commerce, that is, its economic CIRCULATION. Diseases, like ideas, spread both literally and *figuratively*; the investigation of Virus is necessarily an investigation of the linguistic effects of metaphor and metonymy. Does Virus dwell in the heart of metaphor, as Burroughs' literary flashlight *Naked Lunch* insists? Or has Virus spread metaphorically into the metonymic chains of signs that subtitle the latest episode of media reality? As filoviruses (Ebola, Marburg) jump from monkey to man and back to monkey, is the power of Virus patiently mastering metaphor (in the sense of the Aristotelian model of finding similitude, or *simulation* in dissimilars) in final preparation for a replication out of the System? Virus has been rapidly climbing the Hegelian ladder of evolutionary thinking like a parallel but parodic micro-history of the industrial revolution; mutating from branch to branch of Darwin's sacred tree, Virus is quickly catching up to its prey.

The field of biology, once the study of life, is quickly becoming the study of death. Every day our bodies invent a new way to die; as a species, homo sapiens possesses an innovative, if cancerous, logic of deterioration that extends from the desecration of the biosphere to the industrial contamination of modern medicine. The postmodern hospital has become the site of a surgical irony with the infestation of antibiotic-resistant bacteria, making it the last place you want to bring your illness--lacking the funds for efficient research the medical community does what it can in terms of industrial chemical sterilization (re: Bleach). Cancer therapy has thus far evolved to the level of radioactive cauterization, whereas AIDS is treated with the rejected cancer drug AZT, a counter-viral strategy by which the 'protective' agent eats apart the host's body from the inside out, slowing the procession of AIDS by transforming the rest of the body into a wasteland of skin and bone[1]. In *The Coming Plague*, Laurie Garrett describes an international meeting of 800 tropical disease experts in 1989 designed to test the readiness of the international community to combat a newly emerging virus (Garrett, 593-4). In a war games simulation of maximum realism, an airborne virus, nearly 100% lethal, emerged out of the war-torn, drought-plagued depths of Africa and, despite the best efforts of the world's top 'disease cowboys,' spread across the planet in under a month. Western medicine can indeed boast of some impressive accomplishments (the elimination of smallpox, the control of formerly-deadly childhood diseases like measles and mumps) but when it comes to the emergence of previously unknown pathogens into overcrowded urban populations, even the most optimistic researchers bite their lip and begin to perspire. If Virus expects a final battle of Miltonic proportions it will be sadly disappointed.

---

[1] Andrew Nikiforuk offers a paranoically effective account of disease and history in *The Fourth Horseman: A Short History of Plagues, Scourges, and Emerging Viruses*. As one of a growing number of voices to approach history from the perspective of Virus, Nikiforuk adds his weight to an already dense conspiracy theory against modern medicine. Regarding the ex-cancer drug AZT, Nikiforuk writes, "Like greased syphillitics, most AIDS patients can't take AZT for too long because of the poison's side effects. The drug not only attacks normal cells but burns out bone marrow, depletes red blood cells, stops DNA synthesis and depresses the immune system." (Nikiforuk, 115). Just as mercury was once prescribed to treat syphillitics, contemporary medical science has compressed toxicity into an over-priced, industrial drug with arbitrary targeting systems. Which strain of Aids, the disease or the cure, is more degenerate?

The proliferation of technology is gaining momentum from the new energies of complexity theory, or chaos math--theories of quantum-dimensional perception that find their aesthetic expression in the fractal imaging of computer art. At the same time, the viral economy of late-capitalism, an economy that craves replication and mutation over invention, constantly produces the NEED for technological extension. Nobel Laureate André Lwoff pronounced in 1959, "A virus is a virus!" (Eigen, 42), formulating a tautological complexity that positions Virus as a self-fulfilling prophecy; like the arousing semiotic play of Gertrude Stein's "A rose is a rose...," Lwoff's proclamation simplifies a complex logic of replicative signification within a feedback loop of the image.

Following the McLuhan metaphor of tehnologically-extended consciousness, more and more PC users are getting hard-wired to the transcendental conscience commercially known as the Internet. The metaphor of the World Wide *Web* suggests a conceptualization of techno-evolution in terms of a BIG BANG theory--everything stretches out to a point wherein it collapses itself into a spectral existence, a negation of time and space so integrated that it cannot be measured. Michael Bukatman, borrowing from Jameson and Baudrillard, locates the moment of atomic inversion as the tension of the last desperate extension outwards of the Space Age that collapses into the microcosmic attraction inward of the Information Age (Bukatin, 2-5). The implosion of the Information Age has reached a point of arrested development, a condition of terminal stasis in the memory banks of a dead civilization. Burroughs sees symptoms of this arrested evolution in the fact that we haven't yet managed to leave the earth in any meaningful way--the collapse into information is the surrender of the universal dream of flying. Debord extends Burroughs' pessimism to a stage of capitalism he calls "Frozen Societies," a condition of "constant equilibrium" that slows history to a timeless stutter, producing a culture of "absolute conformism" (Debord, Paragraph 130). And yet this terminal stasis is threatened by the potential for METASTASIS, a potential replication across the fuzzy borders between cultural codes. Baudrillard, in *Transparency of Evil* writes:

> A centripetal compulsion coexists with a decentredness of all systems, an internal metastasis of fevered endogenic virulence which creates a tendency for systems to explode beyond their own limits, to override their own logic - not in the sense of creating sheer redundancy, but in the sense of an increase in power, a fantastic potentializatioin whereby their own very existence is put at risk.
>
> (Evil, 5)

Like quantum particles, cultural systems expand and collapse simultaneously; it is their absolute blurrring velocity that provides the illusion of stability: *In a universe of texts, intertextuality proliferates the illusion of meaning.*

Baudrillard employs virus as the reflexive, fundamental metaphor of a systemic collapse that spreads from economics and politics (the social body) to sex and pollution (traumatized individual bodies) in an attempt to decipher the self-destruct code of a dying Western culture. Baudrillard writes of "the system's secret pathology," in which "viruses are part and parcel of the hyperlogical consistency of our systems" (Evil, 38-9); the viral proliferations of structuralism (an exercise in 'pattern recognition' and application to otherwise distinct phenomenon) reach a critical mass, twitch and spasm for decades before necessitating a metamorphosis into what is (arbitrarily) considered 'poststructuralism.' Baudrillard, having spent much of his academic career engaged in a delicate micro-surgery of The Sign,[2] follows (perhaps inititates) the move to poststructuralism by approaching discourse itself as the hypersaturation of inbred structures, a meta-structuralism in which critical theory breaks down into the viral replication of signifiers within the stress-fractured code of culture choked to death by its own excess. The question, "what happened to Baudrillard? (He used to be such a nice young man)" is a sublimation of contemporary criticism's fear of its own reflection, a distorted image (Death Mask) that has been captured and preserved within the mirror of Virus. The last challenge for critical theory is to find the eloquence to write its own obituary.

---

[2] For a critique of the political economy of the sign check out Baudrillard's *For a Critique of the Political Economy of the Sign* (1981)

Viral criticism is possessed by an inescapable attraction to its subject; as the critic engages with fiction, theory, and film that manifests a hyperconsciousness of viral code, infectious texts attach themselves to the critical host, attempting, like a biological or technological virus, to transform the host into a textual conduit of pure proliferation. The study of Virus makes no pretension to critical autonomy, but rather surrenders itself before the text, becoming a psycho-textual medium through which the voice of Virus can finally speak. Mimesis--appropriated for so many generations by a greedy literary criticism that fetishizes a narcissistic mirror--is the language of Virus, an incestual mirroring that expands with the fractal logic of infinite desire. In order to engage Virus at the critical level criticism must open itself up to infection, must celebrate the ingestion of a foreign (anti)body in a quest for linguistic metamorphosis.

The writing of fiction has always been a kind of conspiracy theory detailing the complexities of social behavior--a symbiotic mimesis that thrives on the stuff of tabloid creativity. Criticism, on the other hand, has maintained a perjorative distance from the creative process of rumour and innuendo, ironic devices for exploring the non-linear connections between ideas--the imaginary language of subliminal (and metonymic) suggestion: the challenge of criticism is to dissolve the artificial opposition that is academic/creative writing. If this argument is beginning to reveal the paranoid *sweatstainsmell* of conspiracy theory please do not become alarmed. If any meta-concept is to be plucked out of the deconstruction of (post)structuralism, it can best be glimpsed in the title of Umberto Eco's essay, "Truth: a fiction." The affliction of criticism is the *panic* impulse to cling to some authoritative reality, some standard of judgement, some arbitrary system of thought. The study of Virus is the absolute saturation of System as pure replication, as technological infinity. The world is a semiological prank, a paranoid crossword puzzle that extends endlessly through the very notion of 'horizon.' Who doesn't dread (in Kierkegaard's sense of the word) the final filling in of the blanks, the lining up of images formulating unspeakable patterns? To complicate matters, conspiracy theory is no longer the exclusive domain of the paranoid schizophrenic. As films like Terry Gilliam's *12 Monkeys* (1996) and Adrian Lyne's *Jacob's Ladder* (1990) demonstrate, the always fragile border between the sane and the crazy, the healthy and the sick, has dissolved like the intestinal linings of an Ebola Monkey. Both Jameson and Baudrillard agree that contemporary culture can be comprehended only in terms of "a full-blown and planet wide schizophrenia" (Evil, 104), a pandemic fragmentation of perspective that interpellates a schizophrenic subjectivity. The endless conspiratorial capers of popular television serials like *The X-Files* (or David Lynch's *Twin Peaks)* reproduce and reflect the ironic idealism of a catch-phrase epistemology; *The X-Files* begins each episode with a slogan, mutating each season from "The Truth Is Out There," to "Trust No One," to the current "Everything Dies." The TRUTH *is* a conspiracy--the conspiracy *is* a FICTION, and, like the memetic[3] realities projected through our televisions by talk-show megacorporations, *the fiction is a truth*.

---

[3] Memetics is a relatively new, but acceleratingly dense, critical perspective first coined by Richard Dawkins, an Oxford biologist. The 'meme' is the basic unit in an economy of ideas that parallels the evolutionary processes of the 'gene,' with the added resonance of the imitative nature of mimesis. Although I will return to the subject at a later point, for now let us consider memetics as an Althusserian theory of ideological interpellation adapted to an information age where networks of screens act as a panoptical culture net.

William S. Burroughs: Serial Language Killer

I. Tyranny of the Word.

> What am I trying to do in writing? This novel [*Naked Lunch*] is about transitions, larval forms, emergent telepathic faculty, attempts to control and stifle new forms.
> I feel there is some hideous new force loose in the world like a creeping sickness, spreading, blighting... Control, bureaucracy, regimentation, these are merely symptoms of a deeper sickness that no political or economic program can touch. What is this sickness?
> --William S. Burroughs
> *Lee's Journals*

The novel Burroughs refers to is the **Word Horde**, a massive collection of writing spanning from the early fifites to the publication of his cut-up trilogy (1961-64), a collection of words that "treats of vast Kafkian conspiracies, [and] malevolent telepathic broadcast stations" (Letters, 269). Burroughs' eternally popular *Naked Lunch* (1959) is largely derived from this chaotic stack of routines, gimmicks, characterizations, observations, experiments, and other recipes for literary revolt. Burroughs was a *bricolleur* of impressions in the decades before he was a writer, a soft machine recording the perceptions of a sharply tuned mind. The intertextual mass that constitutes Burroughs' bibliography includes both a filmography and a discography, ranging from his spoken word performances to collaborations with multi-media artists like Laurie Anderson, painters like Brion Gysin, and early industrial bands like Throbbing Gristle. Burroughs has meticulously wound his way into popular consciousness, passing through generations like a benign tapeworm; Burroughs is himself a kind of culturevirus (a friendly *counter*virus one hopes), mutating into new strains that appeal to ever-evolving subcultures. Much of Burroughs' writing participates in a game of universal intrigue and conspiracy[4], a literary mapping of the world of boyhood adventure stories, private dicks, and technological espionage. It is a world without women, a never-never land with closets full of lost boys just waiting to be found.

Writers are agents of the Nova Police, a high-tech elite destined to cut the word lines of the Nova Mob Conspiracy. In *Nova Express* (1964), Burroughs confesses to the reader, "One of our agents is posing as a writer. He has written a so-called pornographic novel called *Naked Lunch* in which The Orgasm Death Gimmick is described. That was the bait. And they walked write in" (Nova, 64-5). Burroughs is referring to the orgiastic hanging scenes of Johnny, Mary, and Mark in "A.J.'s Annual Party" (Lunch, 80-94), a chapter that was the focus of one of the most heated obscenity trials in American literary history. Burroughs answers the puritan critics in a 1961 interview: "Certain passages in the book that have been called pornographic were written as a tract against capital punishment in the manner of Jonathon Swift's *A Modest Proposal*. These sections are intended to reveal capital punishment as the obscene, barbaric, and disgusting anachronism that is capital punishment" (Corso & Ginsberg, 1961). Towards the end of *Naked Lunch* Burroughs anticipates the official reaction to the book: "Senators leap up and bray for the Death Penalty with inflexible authority of virus yen... Death for dope fiends, death for sex queens... death for the psychopath who offends the cowed and graceless flesh with broken animal innocence of lithe movement..." (Lunch, 202). Close reading reveals that Burroughs spins a web, a word trap, a 'de-scription' that *attracts* legal action. "And they walked *write* in." The Swiftian satire provides the reflective surface in which the so-called Justice System is forced to recognize its own barbaric obscenity. In this case, satire provides not only a language of social protest, but also the commercial boost that necessarily follows controversy (Miles, 6). The company photograph of the Beats, with Burroughs looking sage and sober in his trademark plain grey suit and fedora, reads like a parody of The Burroughs Corporation: William's grandfather had, after all, invented the Burroughs Adding Machine. Rather than crunching numbers, however, Burroughs and his 'associates' (Kerouac, Ginsberg, Gysin, Corso, Giorno, and Huncke) became a letter-crunching movement, a deconstructive literary task-force targeting the state-produced fantasy world of post-war America. For William S. Burroughs, the military-state-industrial complex of authority is an illusionary effect of the power-structures built into language. Once the virus is identified as WORD, extermination can begin.

---

[4] In an essay, "In the Interests of National Security," Burroughs declares "This is a game planet. All games are hostile and basically there is only one game, and that game is war" (Adding, 155). Burroughs chooses to engage the enemy within the battlefield of language, a warzone of atomic signification.

Burroughs first formulates the equation of drug addiction and control in his introductory essay to Naked Lunch, "Deposition: Testimony Concerning A Sickness":

> Junk is the mold of monopoly and possession...
>
> Junk is the ideal product... the ultimate merchandise. No sales talk necessary... The junk merchant does not sell his product to the consumer, he sells the consumer to his product. He does not improve and simplify his product, he degrades and simplifies the client...
>
> Junk yields a basic formula of "evil" virus: *The Algebra of Need.*
>
> (Lunch, x-xi)

The Algebra of Need becomes the unified field theory of junk--no matter how you add things up, the final product is always the cold sweat of a junkie desperate to score. After receiving the Apomorphine cure at a British clinic in 1960, Burroughs began to realize that the institutionalized control mechanisms, the "junk virus," could indeed be neutralized by a metabolic vaccine. Following the claim of Marx that religion is the opiate of the masses, Burroughs extends the metaphor to the religion of Gutenberg culture--the true opiate of the masses has synthesized itself into the semiotic chains of association that is commonly called language. Burroughs writes: "Apomorphine combats parasite invasion by stimulating the regulatory centers to normalize metabolism--A powerful variation of this drug could deactivate all verbal units and blanket the earth in silence, disconnecting the entire heat syndrome" (Nova 47). The 'heat syndrome,' the withdrawl mechanism that Burroughs describes as "a reflection of nuclear fission" (Nova, 46), is the splitting of the subject into ego and need, a host/parasite relationship as tightly wound as the double helix of DNA. If Apomorphine can restore unity to the junky why can't the drug be further synthesized to neutralize the mass addiction to language, a 'naturalized' conformity of phrases and expressions that regulates the reproduction of repressive values? In a footnote titled "Note From The Technical Department of Nova Police," Burroughs asks, "What is pain?--Obviously damage to the image--Junk is concentrated image and this accounts for its pain killing action" (Nova, 58). In order to isolate the concentrated image of Junk, the writer must perform a deconstructive reading of the patterns of expression and communication. Words become the basic units in a science of conformity, a system of control which must be unwritten and rewritten in order to expose the virus.

The word comes to represent, for Burroughs, everything that is alien or artificial to the human organism.[5] In a section of *The Ticket That Exploded* (1962) called "operation rewrite," Burroughs elaborates on the parasitism of language on human culture:

> The 'Other Half' is the word. The 'Other Half' is an organism. Word is an organism. The presence of the 'Other Half' a separate organism attached to your nervous system on an air line of words can now be demonstrated experimentally... From symbiosis to parasitism is a short step. The word is now a virus... The word may once have been a healthy neural cell. It is now a parasitic organism that invades and damages the central nervous system.
>
> (Ticket, 49)

Burroughs' syllogism extends a kind of evolutionary logic to the linguistic colonization of the subject, a logic of the 'other' which predates the work of Jacques Derrida. Undeniably influential in French literary circles, Burroughs himself owes a debt to the progress of French Structuralism, in particular the work of Ferdinand de Saussure. In *The Place of Dead Roads* (1984), Burroughs' eternally boyish alter-ego Kim Carsons pays equal homage to the literature of linguistics and the literature of disease: "Kim's guess that language operates on the virus principle of replication has been verified in the Linguistic Institute located outside Paris. Any language can now be conveyed by a series of injections... Matter into energy... Word back to virus" (Roads, 206). Saussure claims that mutability is the necessary effect of the circulation of language (Saussure, 12), that, as it is passed from consciousness to consciousness, language adapts in order to extend its control, in order to unite individual subjects under its command. Saussure maintains, however, that language is always the product of historical forces (Saussure, 8), whereas Burroughs insists that language is the instigator of historical forces which come to be reflected within language. Rather than a product, Burroughs sees language as the ultimate consumer, a self-contained economy of the production and consumption of reality which regulates human behaviour.

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[5] At this point I believe it is necessary to comment briefly on Burroughs' mysoginy, an antifeminist streak which has softened over the decades. Both in his novels and in published interviews, Burroughs has made it clear that he identifies 'woman' as a heterosexual control mechanism that interferes with man's evolutionary progress. Woman is identified with "the Other Half," which in turn is identified as word/junk/control: "If you will excuse me ladies, nothing personal... we are all tainted with viral origins. The whole quality of human consciousness, as expressed in male and female, is basically a virus mechanism. I suggest that this virus, known as 'the other half,' turned malignant as a result of the radiation to which the Cities of the Red Night were exposed" (Cities, 25). Burroughs somehow reconfigures the virus of sexual difference onto the female body, freeing homosexual males from viral captivity within gender binaries. The study of virus removes itself from the study of Burroughs at this point--as Donna Haraway demonstrates, the study of virus can easily take the form of feminist criticism. Burroughs' mysoginy can neither be excused nor can it be ignored. However, the mysoginy virus can be put aside temporarily for future analysis, and, for the sake of a clearer argument, that is what I propose to do.

Virus is colonizer; whether it be the scourge of smallpox that created the illusion of the Americas as *tabular rasa* or the corruption of Quebecois culture by English words, Virus is the pattern of expansion, the quest for new resources, the lust for infinfite replication. Popular culture villifies the colonization virus through television and film ideology (for example, *Star Trek*'s ongoing battle to hold back the Borg, a cybernetic collective that assimilates races in a technological drive towards the complete integration of universal life) and yet the same medias that decry colonization (quite ironically) as 'uncivilized' are themselves working examples of image-conformity (eg. Nike's catchphrase ideology, Don't think about it, "Just Do It," reproduced in magazines, on TV, on t-shirts)[6]. Burroughs draws the connection between the alien language parasite and historical imperialism, "In short these controllers brought their vices and diseases from their planet of origin and infected the human hosts very much in the same way that the early colonizers infected so-called primitive populations" (Ticket, 59). A lifelong student of Egyptian, Mayan, and Aztec language and culture, Burroughs harbours a keen distaste for every role in the colonization equation. The 'pre'history of South American cultures is one of war and genocide as empires rose and fell on the blood of their enemies, a virus cycle that climaxed in the so-called discovery of the New World.

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[6] Ironically enough, Burroughs appeared in television ads for the footwear megacorporation Nike in 1994. As Burroughs has shown no other symptoms of senility, it must be assumed that the Nike ad campaign is part of Burroughs ongoing exploration of media culture, an internal mapping of the Image machine.

An increasing number of disease historians are approaching the evolution of micro-organisms as the dominant causative forces of human sociological development. Whether contributing to a labor shortage that ushers in a new order of class structure or paving the way for imperialist expansion, Virus is the logic of history--an epidemic of colonization in which Hegel's master/slave is played out at the genetic level. Nikiforuk declares, "If the Black Death was an ecological disaster then the invasion of the New World was a biological Armegeddon" (Nikiforuk, 78-9), overstating the case with a viral enthusiasm. In a chapter titled "The Smallpox Conquest: Biological Imperialism," Nikiforuk explains the history of smallpox from its European roots to its infestation of the "virgin soil" (84) of the aboriginal American bloodstreams as a narrative of the apocalyptic collapse of old world containment in the birth of new world disease markets. As in the case of the Inca poet who describes a man dressed all in black opening an ornately-carved box of pestilence (88), Virus expresses itself best in mythological dimensions, dimensions that parallel the epic weight of corpses that mark its path. Nikiforuk writes, "Convinced that their gods had abandoned them, thousands of

Amazonians took to Christianity like some kind of mysterious but useless antibiotic... The relentless progress of Old World germs and the cultural disintegration it wrought demoralized Jesuits, who counted souls the way conquistadors counted gold" (89). The juxtaposition of science and religion in Nikiforuk's analysis demonstrates that both are merely metaphorical readings of shifting economies of life and death. The Amazonian gods did not desert, rather they were consumed by a Christian virulence with an unquenchable thirst for 'virgin' blood. The catholic church had reached a state of extreme amplification within the Old World before exploding into the americas, where, stripped of spirit, entire civilizations died at the feet of soul-thirsty, vampiric missionaries. Burroughs himself insists, "Christianity is the most virulent spiritual poison ever administered to a disaster-prone planet" (Roads, 33), and that radical alternative practises are required to "break the Christian monopoly" (Cities, 105). To the eyes of the Church (the blind, bloodshot stare of Ebola) the sacrifices of genocide merely fueled the fires of replication and expansion. Colonization destroys with the attack-pattern of Virus, injecting the native population with cancerous infrastructures-- as Burroughs writes, "Democracy is cancerous, and bureaus are its cancer. A bureau takes root anywhere in the state, turns malignant like the Narcotic Bureau, and grows and grows, until it chokes the host" (Lunch, 121). The smoke of viral genocide clears only to reveal the distinctly Western, political tumor of statehood, a disease marked by the eruption and extreme swelling of bureaus that clot ethnic arteries by enforcing the pace of parasitic bureaucracy. The postcolonial instinct for repetition, rehearsed and conducted endlessly by 'humanitarian' missionary organizations--the guilty conscience of white liberal capitalism--is the sociological scar tissue of Virus that refuses to heal. Third World Awareness, drilled into television consumers with the game-show authority of Alex Trebek, is the air-raid siren of a failed hegemony; reminding the western world (a) how good we have it (b) there still exists difference--entire markets ripe for a *media*ted first worldization.

The white plague, however, is a finite burn that, following the expansion/implosion logic of Virus, verges on a linguistic meltdown. Having played host to a viral imperialism for centuries, Western culture has begun to crack under the screaming weight of postmodernism; a critical fracturing of power that invests Virus with an incestual lust for its host. In a discussion of the genocide of the Alakaluf of Tierra del Fuego, a linguistic colonization that saw the monist Alakaluf come to refer to themselves as "foreigners" *within their own language*, Baudrillard prophecies a virulent reversal: "In their singularity, that could not even conceive of the Other, the Alakaluf were inevitably vanquished. But who can say that the elimination of this singularity will not turn out, in the long run, to be fatal for the Whites too? Who can say that radical foreignness will not have its revenge--that, though effectively conjured away by colonial humanism, it will not return in the form of a virus in the bloodstream of the Whites [?]" (Evil, 135). By invoking the ignorant logic of Western media towards AIDS, it becomes clear that what began as a population control microbe designed (by GOD) to reinscribe heterosexual, procreative values--to protect the youth from the corrupting influence of junky/faggots--has now become a largely heterosexual disease. The absurd contextualization of Virus has already initiated a reversal into the infinite inner space of information networks, swallowing Western culture information bit by bit.

It is upon the steaming mass grave of smallpox that the roots of American culture are fertilized. Burroughs warns that "America is not a young land: it is old and dirty and evil before the settlers, before the Indians. The evil is there waiting" (Lunch, 12). As corporate aesthetics experiences a violent surge of interest in aboriginal forms and structures, mini-malls shingle their roofs with (simulated) adobe clay bricks, and Fortune 500 lobbies proudly boast Inuit soapstone hunters, urban spaces erect memorials to imperialism, powerful subliminal figures that foreshadow a viral return. Nikiforuk writes, "Immigrants, of course, can only invent their own destinies in lands where disease has smothered the original inhabitants, and in this respect the Americas are really the first cultures ever designed by a virus" (Nikiforuk, 79). Nikiforuk traces the emergence of the slave trade back to the smallpox invasion and its creation of massive labor shortages (98), outlining the commodification of racism which has sprung up into a media culture in which actors perform race on television commercials, seeking constantly to define and update the implications of 'color' for confused audiences. Burroughs parodies the Race Virus in *Naked Lunch,* charting the ideological mutation of an Ethiopian virus (Burroughs describes a "feelthy," venereal Ethiopian sodomizing Pharoah):

> So it started in Addis Ababa like the Jersey Bounce, but these are modern times, One World. Now the climactic buboes swell up in Shanghai and Esmeraldas, New Orleans and Helsinki, Seattle and Capetown. But the heart turns home and the disease shows a distinct predilection for Negroes, is in fact the whitehaired boy of white

> supremacists. But the Mau Mau voodoo men are said to be cooking up a real dilly of a VD for the white folks. Not that Caucasians are immune: five British sailors contracted the disease in Zanzibar. And in Dead Coon County, Arkansas ("Blackest Dirt, Whitest People in the U.S.A.--Nigger, Don't Let The Sun Set On You Here") the county coroner came down with the buboes fore and aft. A vigilante committee of neighbors apologetically burned him to death in the Court House privy when his interesting condition came to light.
>
> (Lunch, 39)

The McLuhanesque globalization of the disease winds its way into the middle of America's foundational race warfare, a battle begun long before the Civil War that will continue until it initiates America's collapse. Racial conflicts continue to mutate (consider the most recent cinematic adaptation of *Romeo and Juliet*, a production necessarily translated into the timeless urban race war of American street culture) to the tune of what Nikiforuk calls the American 'cult of the future': "The American Empire now behaves like a virus, valuing mobility, reinventing its identity and constantly erasing tradition" (100). The continuing media sagas of Michael Jackson (the androgyne without race) and O.J. Simpson (the man who violates racial/sexual taboos) are merely the *serial*ization of the ongoing *sequel*ization of America's Race Virus.

Language is a virus that materializes the body and regulates the relationship between physical being and thought. In *Nova Express* Burroughs quotes The Invisible Man (an autobiographical extension of the writer--in Mexico City, the local boys called Burroughs "El Hombre Invisible" [Lunch, 61]): "These colorless sheets are what flesh is made from--Becomes flesh when it has color and writing--That is Word and Image write the message that is you on colorless sheets determine all flesh" (Nova, 36). Burroughs' repetitive prose reflects the performative and cumulative identity of a writing subject that constitutes a body as the carefully polished product of its own description. Whether it be in the public code of adjective categorization that officially defines a citizen on the back of a driver's license (height, weight, skin colour, hair colour), or a self-image that is the product of a literary consciousness raised on cleavage and lace romance novels, language is the mirror in which the body takes form, the way it begins to make *sense*.

Burroughs devises yet another formula for understanding the physical restraints of language that paralyze individuality: "Life without flesh is repetition word for word. Only way we get out of Hell is through repetition. That's why we all obey virus orders and endlessly reproduce its image *there* in the living" (Ticket, 188). "Orders," here, has the double sense of both authoritative commands and carefully 'ordered' chains of signifiers; Burroughs orders his reader into watching the double collapse into the single. Context is the *pre*text of the Virus Language Power that veils its control as the 'freedom' in the play of meaning--if a word has multiple meanings, one must illuminate the connections *between* meanings in order to determine the true function of the word. This effect can be found continually in Burroughs' punning style: the "Other Half" is the illusion of duality, the false promise of the open signifier, the shimmering oasis of unfettered language. It is this illusion of a free linguistic will that allows the Virus Language Power to mutate consciousness into slavery. The unsuspecting reader awakes to find herself a slave in the Nova language mines of uranus, a servant of lexical conformity chipping away eternally at the same words, in the same order.

It is the *coming* flesh that offers an escape from the tyranny of language in the blank consciousness (a screaming white noise SILENCE) of orgasm. Burroughs sexualizes the language virus, allowing him to thrust beyond the collective morality of censored communication and enter into the non-linguistic world of taboo, a world that Freud characterizes by its totemic organization (Freud, 1960). Burroughs fucks language like a horny deconstructionist eager to taste the sweat of a signification on the run. Burroughs explores this violent literary fetishism extensively in the trilogy *Cities of the Red Night* (1981), *The Place of Dead Roads* (1984), and *The Western Lands* (1987). Set against a mythological masturbation fantasy background of cowboys, pirates, and private dicks, language acts become sex acts in the imagination of the authorial alter-ego Kim Carsons:

> He loved to read about diseases, rolling and savoring the names on his tongue: *tabes dorsalis*, Friedrich's ataxia, climactic buboes... and the pictures! The posionous pinks and greens and yellows and purples of skin diseases, rather like the objects in those catholic stores that sell shrines and madonnas and crucifixes and religious pictures. There was one skin disease where the skin swells into a red wheal and you can *write* on it. It would be fun to find a boy with this disease and draw pricks all over him.
> (Roads, 19)

Skin diseases are the cancerous eruptions of the flesh which provide a canvas on which to reinscribe the pleasures that exist in opposition to language. Kim wants to literally prick pricks all over his prey, to redesign the flesh away from linguistic containment by marking it with a (phallic) needle, the pen of a junk starved writer injecting hypermasculinity into the skin of his prey. But the dependency of the body on language is a tough, cold burn:

> About ten days in the hospital... You realize that you don't talk with your mouth and throat and lungs and vocal chords, you talk with your whole

> body... And the body keeps reaching back for the old language--it's rather like junk withdrawl in a way... The erotic manifestations always occur... It's like the subject is being raped by language, shouting out obscenities in the injected idiom...
>
> (Roads, 207)

Having kicked junk nearly almost as many times as I've quit smoking, it is poetic justice that Burroughs is able to invest his novels with an infectious, diseased eroticism, raping language with an ironic, literary lust.

The Virus B-23, the time/space virus of *Cities of the Red Night*, emerges from a combination of opium withdrawl and anal intercourse in the body of Farnsworth, the colonial District Health Officer assigned to a cholera epidemic. As Farnsworth is overcome by the new disease, "a horse hissing sound was forced from his lips and light popped in his eyes as his body boiled and twisted out scalding spurts" (Cities, 11). Dr. Pierson, a plague scientist, explains the nature of the disease: "The virus, acting directly on neural centers, brought about sexual frenzies that facilitated its communication, just as rabid dogs are driven to spread rabies by biting. Various forms of sexual sacrifice were practised... sexual hangings and strangulations, and drugs that caused death in erotic convulsions" (Cities, 20-1). Forming a literary feedback loop to the controversial hanging scenes of *Naked Lunch*, this passage also reveals the virus to be part venereal disease and part aphrodisiac--a sexual parasite that spreads by transforming its hosts into addicts of sex/death rituals. The virus is thus a kind of 'smart bomb,' an organism with a self-correcting, self-replicating micro-intelligence. When combined with the use of narcotic 'Red Hots,' an aphrodisiac that "causes an erogenous rash in the crotch, anus, and the nipples" (Cities, 175), Virus B-23 reaches a pandemic level of penetration, spreading not only across space, *but through time*. The present has been infected by the past and will necessarily contaminate the future--this is the tautological flatulence of history: but a disease with the science-fictional ability to jump in and out of time, a disease irradiated with the mutations of an entire time-line of technology--Virus B-23 is Apocalypse in a synthesized, pharmaceutical form. The sexual commodification of Virus into a mythical form (Burroughs claims he is producing a mythology for the Space Age) provides Burroughs with a mystical soapbox from which to speak. Just as the novel opens with an invocation "to *Pazuzu*, Lord of Fevers and Plagues, Dark Angel of the Four Winds with rotting genitals" (Cities, xvii) so the story ends with:

> *The Fever*: A red silk curtain scented with rose oil, musk, sperm, rectal mucus, ozone and raw meat goes up on a hospital ward of boys covered with phosphorescent red blotches that glow and steam the fever smell off them, shuddering, squirming, shivering, eyes burning, legs up, teeth bare, whispering the ancient evil fever *words*.
>
> (Cities, 321)

Somewhere between the frenzied incantation of a sexual spell and the intense physical twitching of orgasm, a radioactive virus has reduced civilization to the pungent rotting of language, the whispering of "ancient evil fever words."

As Inspector Lee of the Nova Police, Burroughs perceives his occupation as that of a literary assassin assigned to the counter-terrorism unit. The most effective antidote at his disposal is the deadly Silence Virus, an aphasic swarm of pestilence that can descend on the page and inject randomness and chaos into the word. An example of this drugging of language occurs in "Uranium Willy"(the Heavy Metal Kid), a science fiction (anti)narrative within *Nova Express*. Here we pick up the adventures of Uranium Willy, also known as The Subliminal Kid, as he explores the insect world of Minraud:

> As he walked past The Sargasso Cafe black insect flak of Minraud stabbed at his vitality centers. Two Lesbian Agents with glazed faces of grafted penis flesh sat sipping spinal fluid through alabaster straws. He threw up a Silence Screen and grey fog drifted through the cafe. The deadly Silence Virus. Coating word patterns. Stopping abdominal breathing holes of the Insect People Of Minraud.
>
> The grey smoke drifted the grey that stops
> shift cut tangle they breathe medium
> the word cut shift patterns words
> cut the insect tangle cut shift
> that coats word cut breath silence
> shift abdominal cut tangle stop word
> holes.
>
> He did not stop or turn around. Never look back. He had been a professional killer so long he did not remember anything else. Uranian born of Nova Conditions. You have to be free to remember and he was under sentence of death in Maximum Security Birth Death Universe. So he sounded the words that end "Word"--
> Eye take back color from "word"--
> Word dust everywhere now like soiled stucco on the buildings. Word dust without color drifting smoke streets. Explosive bio advance out of space to neon.
>
> (Nova, 68-9)

As the Silence Virus is voiced the binds between words are dissolved, leaving cold burned spaces like smooth scars on the page, decontextualizing the space of the page from standard, indented paragraph to a cloudy grey skin pocked by erupting word sores. Like a super-infectious biological weapon, the Silence Virus quickly sweeps across the page of the text, opening up the spaces that make possible an inter-active reading of *Nova Express*. In order to make sense of the fractured paragraph the reader must enter into the blank spaces and fill the gaps, engineering his own viral codes and participating (silently) in the feedback mechanism of the text--an interactive textuality prescribed in the Atrophied Preface at the end of *Naked Lunch*: “Naked Lunch demands Silence from The Reader. Otherwise he is taking his own pulse” (203).

Burroughs issues a warning of the potential contamination at play in the text, that is, at the same time, a revolutionary call to arms: “Shift linguals-Free doorways-Cut word lines-Photo falling-Word falling-Break Through in Grey Room-Use partisans of all nations-*Towers, open fire*-” (Nova, 69-70). A warning, an explanation, a prophecy, and a threat, these words loop in and out of the novel, cutting in and out of the text like the signals of an emergency broadcast system. Just a few pages later the transmission mutates to read:

> “Calling partisans of all nations-Cut word lines-Shift linguals-Vibrate tourist-Free doorways-Word falling-Photo falling-Break through in Grey Room-
>
> ___._   .___   ____   ._.   _..   .._.   ._   ._..
> ._..   _.   __.   .__.   ....   ____   _   ____   .._.
> ._   ._..   ._..   .._.   __.”
>
> (Nova, 73)

What begins as a broadcast of short word pulses dissolves into morse code, drawing attention to the nature of language as an artificial encryption of ideas. The morse code reads, “Word Falling Photo Falling.” And yet the translation is imperfect perhaps due to the fact that Burroughs continually cuts his prose with strange punctuation patterns. Burroughs slashes word lines the way Emily Dickinson dashed from image to image; throughout his writing the dash suggests the STOP of telegraphic messages. Burroughs' text is largely devoid of period (an attempt to escape the temporality of literary history?) and yet it is scarred by dashes which infiltrate sentences like cancer cells attacking bone marrow. Is the error in translation merely an error in punctuation, or is Burroughs making a point about what Leonard Cohen calls, in his song 'Closing Time' (the title of which derives from a Burroughs essay, "The Four Horsemen of the Apocalypse"), "the breaking of the ancient western code?" Baudrillard extends this metaphor of a deciphered aesthetic to the cracking of the genetic riddle, theorizing a viral exposure to the idea that human life is just a chapter written in a genetic alphabet: "Just as some biological disorders indicate a break in the genetic code, so the present disorder in art may be interpreted as a fundamental break in the secret code of aesthetics," a fracturing of the language of Image (Evil, 15).

In a letter to Allen Ginsberg dated Feb. 27, 1956, Burroughs confesses, "I fall half asleep reading something and the words change or take on a curious dream significance as if I was reading code. Obsessed with codes lately. Like a man contracts a series of illnesses which spell out a message. Or he gets message from subsidiary personality by farting in Morse code" (Letters, 311). This obsession finds its way into *Naked Lunch* both directly (Lunch, 61) and indirectly in the form of Burroughs' infamous "Talking Asshole" routine. Dr. Benway describes the man who taught his asshole to talk, a bodily speech that "hit you right down there, a bubbly, thick stagnant sound, a sound you could *smell*" (Lunch, 120). Of course the asshole soon learns to ad-lib, spinning off its own routines, getting drunk and wanting to be kissed, refusing to be silenced. Burroughs explains this 'body language':

> Sub-vocal speech is the word organism the 'Other Half.' spliced in with your body sounds. You are convinced by association that your body sounds will stop if sub-vocal speech stops and so it happens. Death is the

> final seperation of the sound and image tracks. However, once you have broken the chains of association linking sub-vocal speech with body sounds shutting off sub-vocal speech need not entail shutting off body sounds and consequent physical death... Wht not rewrite the message on 'the soft typewriter'?
>
> (Ticket, 160)

The schizophrenic tauntings of sub-vocal speech must be decoded in order to be isolated from the friendly expressions of the body. Letting the asshole talk is natural: letting it speak *for* the subject is profane. "Farting in morse code" allows the body to communicate with itself and such outbursts can be decoded by the body's natural ciphers. This disembodying of language is always written on the soft machine, the organic technology that erases the artificial, linguistic space between flesh and technology. Burroughs describes a strange interrogation device known as The Switchboard:

> Electric drills that can be turned on at any time are clamped against the subject's teeth; and he is instructed to operate an arbitrary switchboard, to put certain connections in certain sockets in response to bells and lights. Every time he makes a mistake the drills are turned on for twenty seconds. The signals are gradually speeded up beyond his reaction time. Half an hour on the switchboard and the subject breaks down like an overloaded thinking machine.
>
> (Lunch, 23)

The thinking machine is conditioned to unquestioningly accept the arbitrary connections of language codes. Failure to complete the metaphor, to put the correct word in its correct place results in social exclusion; the arbitrary control code is 'drilled' into Pavlovian linguistic subjects at every stage of the educational apparatus. Dyslexia is a reversal of the code, an inversion of the sequential, left-to-right logic of Western languages; as an alien reading strategy, Dyslexia and other linguistic-processing disorders are met with intensive corrective therapy and conditioning by an educational system that operates on the same principle as The Switchboard, complete with heavy doses of physical and psychological discipline.

Code, like adjective language, is sexualized in *Naked Lunch* to express its viral foundations--an encrypted desire for proliferation and a fierce logic of expansion. Burroughs satirizes Cold War surveillance technology in his description of venereal codes:

> Two agents have identified themselves each to each by choice of sex practises foiling alien microphones, fuck atomic secrets back and forth in code so complex only two physicists in the world pretend to understand it and each categorically denies the other. Later, the receiving agent will be hanged, convict of the guilty possession of a nervous system, and play back the message in orgasmal spasms transmitted from electrodes attached to the penis.
>
> (Lunch, 188)

This exaggerated critique of conspiratorial power games is elaborated further in *Nova Express* in a note titled, "*Technical Deposition of the Virus Power*." Burroughs' use of the image crystal is an eerie premonition of the silicon chip, now a corporate crystallization of greed and power:

> "Gentlemen, it was first suggested that we take our own image and examine how it could be made more portable. We found that simple binary coding systems were enough to contain the entire image however they required a large amount of storage space until it was found that the binary information could be written at the molecular level, and our entire image could be contained within a grain of sand. However it was found that these information molecules were not dead matter but exhibited a capacity for life which is found elsewhere in the form of virus. Our virus infects the human and creates our image in him.

> We first took our image and put it into code. A technical code developed by the information theorists... Information speeded up, slowed down, permutated, changed at random by radiating the virus material with high energy rays from cyclotrons, in short we have created an infinity of variety at the information level, sufficient to keep so-called scientists busy forever exploring the 'richness of nature.'
>
> (Nova, 57)

Burroughs claims that all of 'nature' is a conspiracy of the proliferation and mutation of code constructed to divert attention away from the structures and practises of language and towards a 'red-herring' science that endlessly chases its own tail. Serial scientific evolution merely increases the distance between individual subjects and a collective, viral code which enslaves human culture within a complex control and conditioning mechanism. As all information moves towards a final goal of digitization--of *dematerialization* within "information networks"-- authentic self-awareness is encrypted within a labyrinth of circuitry and electricity--a surrogate brain that parasitically feeds off *simulated* experience. As Burroughs writes, "Virus defined as the three-dimensional coordinate point of a controller--Transparent sheets with virus perforations like punch cards passed through the host on the soft machine feeling for a point of intersection" (Nova, 80); language passes through the individual like a "*tape*worm" that records and manipulates perception into a micro-filmed energy--a kind of perverse *photosynthesis* of the image.

The effect of language virus is an eruption of technology within and on the body, a viral, cellular take-over of the body that manifests itself in a symptomatic electrification and prostheticization of the human subject. Marshall McLuhan, in his textually experimental book COUNTERBLAST (1969), writes, "If printing was the mechanization of writing, the telegraph was the electrification of writing" (BLAST, 94). The electrification of language collapses the act of reading into the speed of sound and now, in the techno-fetishism of the nineties, this collapse parallels the speed of light; the speed of information has become the orgasmic speed of consciousness, threatening the very integrity of codification. The fear of collapse is due to what Derrick De Kerckhove calls the Jericho Effect: "the ability of an electronic code to infiltrate all substances and translate them into itself. Electricity takes off from the alphabet" (De Kerckhove, 82). The electrification of language signifies the evolution of viral code that enables it to 'jump species' like a horny bug. As McLuhan declares in his own emergency signal:

> The
> IVORY TOWER
> Becomes
> The CONTROL TOWER
> of
> HUMAN NAVIGATION
> (Blast, 143)

McLuhan's conception of language as the control tower of perception is a response (however unconscious) to Burroughs' command "*-Towers, open fire-*". An interesting lineage of inheritance can be traced from James Joyce to McLuhan through Burroughs. Whereas Joyce first cracks the code of language, exploiting the gaps of context to reveal a deeper stream beneath language, Burroughs theorizes Joyce's experiments as a viral fiction, an artificial reality code. McLuhan, a credible scholar of Joyce[7] (and enthusiastic reader of Burroughs), intercepted Burroughs' signal and transcribed the code into a media philosophy, a recipe for expanded consciousness and counter-cultural expression. *Ulysses* and *Naked Lunch* are two of the most controversial books ever published--and yet the smooth appropriation of McLuhan into the pop-cultural canon serves to demonstrate the collapse of enforced cultural boundaries that is symptomatic of *postmodernism* (the italicization of which, I hope, expresses the *pure speed* of McLuhan's theories).

II. Getting Language High

It seems evident enough what Burroughs means when he declares that language is a virus, but what is to be made of the mutual connection of virus and language to drugs? Language is junk and junk is virus--virus is control and control is code. What breaks the code is an adjustment of perception, a chemical tuning of the frequencies in order to focus otherwise blurry patterns. It is important to note that Burroughs differentiates strongly between junk--the opiate family of heroin, morphine, and their synthetic cousins like demerol--and other, *non-addictive*, consciousness-expanding drugs. As an ex-junky with both a clinical and practical knowledge of narcotica, Burroughs is as much of an authority on recreational drugs as anyone (with the possible exception of Dr. Timothy Leary and Dr. Albert Hoffman, the pioneers of LSD research).

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[7] McLuhan's body of work is tattooed with the fragmented skin of Joyce--from the odd mention of *Ulysses* in *Understanding Media* to the excerpts from *Finnegan's Wake* that are juxtaposed with magazine advertisements on every page of *Culture is our Business*. Although not immediately recognizable as a major scholar of Joyce, McLuhan's attention to technology, understanding of language as the code of social construction, and obsession with modernist techniques of perspective point to a reading of McLuhan that is itself a reading of Joyce.

Burroughs' early writing was often produced in co-operation with *majoun*, a kind of hashish-resin candy. In a seminar transcript published in *The Adding Machine* (1985), Burroughs speaks of the relationship between drugs and writing:

> People will dream less if they are using grass or LSD or any of those drugs, because they are doing their dreaming in a waking state. By hallucinogenic I don't mean it produces actual hallucinations. It certainly extends awareness and I think it makes your imagery more vivid, while at the same time you recognize it as imagery--you don't see it as hallucination. As to the literature of the hallucinogens, I don't think that literature exists. People are not going to become writers just because they are high... There is a lot of writing done by people after they have taken LSD; I remember whole collections of it. Most of it is terrible, vague, and in essence not good writing. *But these people were not experienced writers.*
>
> (Adding, 158, emphasis mine)

If 'hallucinogens' like marijuana, LSD, psilocybin mushrooms, peyote, or mescaline extend awareness, consciously configured as an extension of imagery, what is the relationship between drugs and experienced writers? Avita Ronell, in the radical criticism of *Crack Wars: Literature Addiction Mania*, attempts to explore just such a question. Ronell, through a fractured and fantastic reading of *Madame Bovary*, makes the claim that "literature is on drugs and about drugs" and then tries to uncover "the symbolic value of drugs, their rootedness in ritual and the sacred, their promise of exteriority, the technological extension of supernatural structures, or the spaces carved out in the imaginary by the introduction of a chemical prosthesis" (Ronell, 50). The "symbolic value of drugs" is the nar*cod*ification of consciousness, the secret language of hallucinogenic perception. What Ronell identifies as a technological extension of the mind is the same distortion of perception McLuhan assigns to television media, itself a mutation of the language virus: "Not until the photograph Movie and TV did there appear any rival to the insatiable cultural conquest of the phonetic alphabet" (Blast, 80). Trying to generalize drugs into Drugs is like trying to isolate Language from language. Ronell writes:

> Drugs resist conceptual arrest... Everywhere dispensed, in one form or another, their strength lies in their virtual and fugitive patterns. They do not close forces with an external enemy (the easy way out) but have a secret communication network with the internalized demon. Something is beaming out signals, calling drugs home.
>
> (Ronell, 51)

Virus emits a beacon, a systems*pattern*pulse that trips effortlessly among endless nodes of a cultural web. The 'virtual' and 'fugitive' patterns resonate in perpetual motion (fugitive) under the illusion of stasis (virtual). These patterns are the effects of viral language which manifests itself as a carefully-contained linguistic 'freedom'--the double vision of language on drugs parallels the quantum possibility of a particle existing in two places at one time.[8] Ronell goes on to claim that Drugs "participate in the analysis of the broken word, or a history of warfare,"(Ronell, 51). Ronell draws connections between drugs, modern warfare, and genocide (the mescaline experiments at Dachau), using the 'or'of the above statement to imply that drugs chart the history of warfare *that is* the analysis of the broken word. Traditionally, literary criticism has been a process not dissimilar to the attempts of a worried parent to understand why his teenage children are always coming home stoned. In order to achieve anything other than a parental (or paternal) generation gap, literary critics must inhale; criticism must get stoned. The conservative nature of a criticism which does not push the limits and extend the boundaries of its own language merely performs a police function for the language virus by acting as the agent of colonization that tries to conquer the text and drag it through the digestive tracts of the culture machine. Criticism must participate in the same kind of "narcoanalysis" (Ronell, 47) that literature explores: writing must be reconfigured as an effect of reading; an infectious intoxication that completes the communicative cycle of perception.

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[8] Jeffrey Winters, in a recently published article, "Quantum Cat Tricks," details an experiment performed at the National Institute of Standards and Technology, in which, using electromagnetic fields, lasers, and a beryllium atom, physicists were able to create a situation where a quantum particle could be manipulated into two distinct particles at one moment. The paradox of the experiment lies in the fact that, *at the same moment*, they also proved that the same matter can exist in two distinct times. Winters' article mainly explores the applications in terms of a quantum computer, in which binary data could be encoded at the same place/time. Language-on-drugs performs a similar escape on the literary level where signification fluctuates quantumly within atomic Signs.

Naked Lunch is packed with routines that exhibit this sharpening of imagery that Burroughs attributes to recreational drugs. Yet Burroughs' prose reflects the dedication of the professional writer 'high' on words rather than the vague ramblings of a hippy kid in rebellion against his father's values. In the following passage from the "ATROPHIED PREFACE" at the end of *Naked Lunch*, Burroughs reveals himself as a dilated pupil of metonymy and juxtaposition:

> The Word is divided into units which be all in one piece and should be so taken, but the pieces can be had in any order being tied up back and forth, in and out fore and aft like an innaresting sex arrangement. This book spills off the page in all directions, kaleidoscope of vistas, medley of tunes and street noises, farts and riot yipes and the slamming steel shutters of commerce, screams of pain and pathos and the displaced bull head, prophetic mutterings of brujo in nutmeg trances, snapping necks and screaming mandrakes, sigh of orgasm, heroin silent as dawn in thirsty cells, Radio Cairo screaming like a berserk tobacco auction, and flutes of Ramadan fanning the sick junky like a gentle lush worker in the grey subway dawn feeling with delicate fingers for the green folding crackle....
>
> This is Revelation and Prophecy of what I can pick up without

> FM on my 1920 crystal set with antennae of jissom.... Gentle reader, we see God through our assholes in the flash bulb of orgasm...Through these orifices transmute your body....The way OUT is the way IN....
>
> Now I, William Seward, will unlock my word horde....
>
> (Lunch, 207-8)

Burroughs unlocks his theory of The Word by example, crashing the chains of association with a metonymic imagery that follows its own psychedelic logic. The Word can be manipulated like a bizarre sexual scenario, and Burroughs is all too eager to conduct the thrusting of signifiers towards orgasmic vibration. Meaning moves beyond simple decoding and is achieved in the complex relations between sounds and images, like a radiowave message picked up through the genitalia. As Burroughs insists, the way Out of the language mines (like the fragile entrance to Plato's cave) is also the way In--the route of escape is the ETERNAL RETURN, the positioning of the subject in a quantum perspective.

III. Metaphor vs. Metonymy: A Battle of Linguistic Will.

The opening of the gates to the word horde is the release of the tension of metaphor into the metonymic floodgates of a cascading imagery. In a discussion of the case *Attorney General vs. A Book named* "*Naked Lunch*," Ronell writes "Literature is most exposed when it stops representing, that is, when it ceases veiling itself with the excess that we commonly call *meaning*" (Ronell, 57). Metonymic novels (Ronell's examples are *Naked Lunch* and *Ulysses*) attract the wrath of an offended judicial morality raised on the positivistic rationalism of a world that translates a message. The primary mode of meaning is metaphor (itself here a figurative metaphor encompassing simile, analogy and every other substitutive associational device). Readers, like writers, have an algebraic need to plug in variables, to translate code into sense. If literature is, as Ronell claims, "a breeding ground of hallucinogenres," (Ronell, 11) then Drugs "are not so much about seeking an exterior, transcendental dimension--a fourth or fifth dimension--rather, they explore *fractal interiorites*. This was already hinted at in Burroughs' 'algebra of need'" (Ronell, 15). Metonymy is the medium of quantum signification; a troped-up word play that allows meaning to fluctuate between linguistic dimensions.

This idea of fractal interiority is the mathematical expression (indeed, the *computerization*) of reality that can only occur in a universe of *simulation*. Baudrillard maps out four levels of simulacre and their corresponding functions: (1) natural stage [use value], (2) commodity stage [exchange value], (3) structural stage [sign-value], and (4) fractal or viral stage [epidemic of value] (Evil, 5). At the fractal (post-structural) stage of simulacre "there is no point of reference at all, and value radiates in all directions, occupying all interstices, without reference to anything whatsoever, by virtue of pure contiguity" (Evil, 5). In the fractal, viral, radiant stage metaphor dissapears as part of the *trans*-ification that proliferates everywhere: *trans*political, *trans*sexual, *trans*economics, and *trans*aesthetics are part of a viral *trans*lation that exists on the liminal interior of a fractured and fractal culture (Evil, 7). Metonymy (defined as a relation of contiguity) is the transposition of metaphor from the sign stage (governed by code) to the fractal stage (endemic of the collapse of code). Baudrillard is nostalgic in announcing the vibration of metaphor to a higher frequency--a eulogy delivered in a tone of optimistic mourning: "Today, metonymy--replacing the whole as well as the components, and occasioning a general commutability of terms--has built its house upon the dis-illusion of metaphor" (Evil, 8). In a *pastiche* [9]of Nietszche's madman in the marketplace, Burroughs parallels Baudrillard's announcement: "Pushing radioactive heavy metal junk? Stand a little back from the game. You see the past is radioactive. Virus is radioactive. The nova formula is simple repetition down a long line of flash bulbs old photos fall on the burning deck. Have you heard the notice? No more is written" (Ticket, 193). Having killed God, bled affect, and dissected nature, the word remains as the last shackle that chains the human organism to a dying planet. Burroughs becomes the radioactive prophet of a nuclear age that melts down metaphor into metonymy.

Jean-Jacques Lecercle, in *The Violence of Language* (1990), approaches the study of metaphor diachronically, both in terms of its emergence as a figure of speech and its proliferation as *the* figure of speech which produces meaning. Lecercle proclaims, "A metaphor is truly false and falsely, or apparently, true. This, I believe, is due to the fact that metaphor is a matter for language, not thought. What gives metaphor this appearance of truth is that it conforms to the rules of language. We are dealing not with 'appearances' but with the reality of a linguisitc *effect*. This is the origin of Barthes' (in)famous maxim, 'language is Fascist'" (Lecercle, 148). There is a danger at play both in metaphor itself and in Lecercle's treatment of metaphor. Metaphor is a linguistic effect, and yet, in its purest form, what kind of effect is it? Is the effect of metaphor the process of the signifier naming the signified? Is language then merely a metaphor of communication (a meta-metaphor?), an analogy of social interaction? If the language virus operates through a metaphorical perception of the world (human knowledge reduced to an 'if x is to y as y is to z...'set of un-equations), then the codification of reality without referent (the endless repetition that Burroughs everywhere reads) becomes itself a metaphor for the arbitrariness of *meaning*. To formulate a metaphor of my own, if the metaphorical moment is the figurative conjunction of signifier with signified within the semiotic particle of the Sign, doesn't analogic writing carry the potential energy of nuclear fission (only *metaphorically*, but therein lies the danger of potentiality)? Whereas metaphor implies the nuclear potential of explosive signification, metonymy suggests the viral expansion of micro-circuitry, the fractal potential of *implosion*. Whereas metaphor expands outwards as a figure of literary colonization, metonymy (as it is used in Burroughs) reaches in to expose and liberate the connections between signs. Metaphorically rooted language, as it is exposed by metonymic language, is a simulation model of meaning.

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[9] In Jameson's sense of the term--a kind of impotent parody, or "the wearing of a linguistic mask, speech in a dead language" (Jameson, 17).

With regard to its relation to meaning, Lecercle writes, "Metaphor makes it clear that meaning is not introduced into the sentence (it does not precede it) but emerges from it (it is an effect). Metaphor reveals the process of production of meaning as a compromise between the author and his language. Meaning is not poured into language, it is (far)fetched from and by language" (Lecercle, 167). If metaphor is a linguistic effect, and meaning is a metaphoric effect (again, linear restrictions reduce my thoughts to Aristotelian logic) then Language itself becomes a simulation model for the incestual logic of Virus. If my reasoning (or Lecercle's) collapses into circularity at this point, the collapse is itself the best evidence of the implosive tendency that marks the metaphorical logic of Virus: Baudrillard writes, "Viral attack is the pathology of the closed circuit, of the integrated circuit, of promiscuity and of the chain reaction - in a broad and *metaphorical* sense, a pathology of incest" (Evil, 65, emphasis mine). Incest, as a conceptual pattern, is the fetishization of metaphor taken to its extreme--the narcissistic desire of language to categorize and compare collapsed in upon itself; a Deleuzian analogy in which the signified makes familiar love to a brood of signifiers--again, a descriptive illusion of meaning which inbreeds through the metaphorical act of naming. In a sense, the Cartesian proof for consciousness, the foundation of Western rationality, is nothing more than a linguistic effect, a metaphor that stands in for self-understanding, a masturbatory stroking of the ego.

Metaphor, as an amplification of meaning, proliferates within language like hepatitis through liver. In a discussion of the arbitrary genesis and incestual proliferation of metaphors, Lecercle wears the surgical mask of irony, formulating an analogy between linguistic history and discourses of Darwinian biology: "From then on, diachrony takes over. Having broken the semiotic status quo and won the struggle for its survival, the metaphor develops. It turns proverbial, gives birth to a cliché, produces offspring" (Lecercle, 161).

This is where we arrive at Burroughs' point of departure: Virus is not a metaphor for the way language works--*Language is a metaphor for the way Virus works.* Metonymy, as a relation of contiguity or association, provides the key which cracks the control code of metaphor. Robin Lydenberg analyzes this relationship between metaphor and metonymy: "Burroughs uses metonymy as a naked version of metaphor. In its extreme form, metonymy allows him to lay bare the repressive abuses of word and image which metaphor works to disguise" (Lydenberg, 31). This point is clear from the first paragraph of the introduction to *Naked Lunch* as Burroughs declares, "The title means exactly what the words say: NAKED Lunch--a frozen moment when everyone sees what is on the end of every fork" (Lunch, ix). The efforts of literary criticism--a narcissistic desire to rearrange metaphor, the parasitic instinct to burn out an interpretive niche within a textual body *that is already written--* are thwarted by the very title; new critical approaches require new strategies of reading--metonymic strategies that listen to the sounds of words rubbing together, strategies that harness the energy of juxtaposition and association rather than replacement and replication. Burroughs' metonymic imagery exposes the "violence and repression inherent in all tropes" (Lydenberg, 34); an exposure that reveals a radioactive addiction to metaphor communicated along word lines and inherited through textual generations like a tumorous control gene.

Metonymic writing, as it is used by Burroughs, isn't so much the use of simple metonymy, as it is the extension of metonymic effects *as a rejection of metaphor*. In *The Ticket That Exploded*, Burroughs continually interrupts the anti-narrative with the metonymic burst of words, "board book symbol chains lynch mobs" (Ticket, 61), a chain of signifiers that suggests, rather than stands in for, thematic concerns. 'Board' is used by Burroughs repeatedly to evoke images of authoritarian bureaucracy as in censorship boards, board of directors, as well as 'bored,' the state of consciousness that is produced by most metaphorical prose. ‘Book’ draws a simple reflexive attention back to the ‘symbols’ that ‘chain’ meaning to metaphor. ‘Lynch mobs’ recalls one of Burroughs’ favorite satirical characters, the small-town, southern, redneck sheriff with a whiskey bottle in one hand and a noose in the other. The symbolic chains of signification (which are reproduced not by individual subjects, but by the system of language itself) choke the will out of linguistic outlaws. Such outbursts become a kind of subliminal strobing of commands that defies metaphorical analysis, instead creating a metonymic effect that extends throughout the novel. As Lydenberg writes, “The insistent literalness, the condensation or displacement of the whole by the part, the tendency to reduction and amputation, are all stylisitic effects which link Burroughs’ style with metonymy, the surgical figure par excellence” (Lydenberg, 31). Metonymy cuts through metaphor like a scalpel, constantly recarving the word organ towards new purposes. This leads to a very reflexive kind of writing (and reading) in which content both gives way to and is produced by form. In one of the more polished routines of *Naked Lunch*, Burrough writes:

> Followers of obsolete unthinkable trades, doodling in Etruscan, addicts of drugs not yet synthesized, black marketeers of World War III, excisors of telepathic sensitivity, osteopaths of the spirit, investigators of infractions denounced by bland paranoid chess players, servers of fragmentary warrants taken down in hebrephrenic shorthand charging unspeakable mutilations of the spirit, officials of unconstituted police states, brokers of exquisite dreams and nostalgias tested on the sensitized cells of junk sickness and bartered for raw materials of the will, drinkers of the Heavy Fluid sealed in translucent amber of dreams.
> (Lunch, 49)

Emancipated from the substitution process of reading for an encrypted meaning, the prose is free to revel in the sounds, images, and associations of the words. It is not *what* the words mean, but *how* they are put together that matters; the resonances that never actually become rhyme; the movement from 'telepath' to 'osteopath' that suggests an imaginative reconfiguration of structural abnormality (the plastic surgery of a malleable language): and yet this reconfiguration is metonymical itself--the sounds of the first word echo and reflect with the sounds of the next, creating a contiguous stream of images.

With regard to the Nova strategies of linguistic self-defense Burroughs writes, "A Technician learns to think and write in association blocks which can then be manipulated according to the laws of association and juxtaposition... Our technicians learn to read newspapers and magazines for juxtaposition statements rather than alleged content" (Nova, 93). Juxtaposition, itself a textual contiguity or spatial relation, creates metonymic associations for Burroughs, bringing language acts into "the translucent amber of dreams," allowing the reader to see through petrified metaphor to the timeless effects of linguistic control. Burroughs demonstrates this metonymic replacement of metaphor brilliantly in Nova *Express*:

> This pattern can be shifted by substituting other factors for words -- Take a simple sex word like 'masturbate'--'jack off'--Substitute color for the words like: 'jack'--red 'off'--white--red--white--Flash from words to color on the association screen--Associate silently from colors to the act--Substitute other factors for the words--Arab drum music--Musty smell of erections in outhouses--Feel of orgasm--Color-music-smell-feel to the million sex acts all time place--Boys red-white from ferris wheel, scenic railways, bridges, whistling bicycles, tree houses careening freight cars train whistles drifting jissom in winds of Panhandle--shivering through young bodies under boarding house covers rubbly outskirts of South American city ragged pants dropped to cracked bleeding feet black dust

> blowing through legs and genitals--Pensive lemur smell of erection--cool basement toilets in St. Louis--Summer afternoon on car seats to the thin brown knee-Bleak public school flesh naked for the physical the boy with epilepsy felt The Dream in his head struggling for control locker room smells on his stomach...
>
> (Nova, 169)

The replacement of 'masturbation' with the alternating flashes of red/white leads the narrator into a 'metonymic skid' of associations and memories. From the rotating colors of the ferris wheel to the dizzying perspective of a train window, the writer reaches back into his collected impressions, creating a subjective rhythm of words that recreates the frenzied pace of adolescent masturbation. The dissociation of signifier into color unleashes an auto-erotic metonymy that satisfies the writer while positioning the reader as cathartic *voyeur*. The result is much more expressive than anything that could be achieved by mere metaphorical anecdote.

In *Cities of the Red Night* Burroughs demonstrates the rejection of metaphor and the resulting play of metonymy, ironically enough, *in a metaphor*. Burroughs writes, "We leave the prisoners digging graves like *sullen Calibans* and proceed to the barracks, where we are greeted by the *smell of cannabis*" (Cities, 191, emphasis mine). The allusion to *The Tempest*[10] is a metaphorical connection to a play that is largely about the *play of texts*. Prospero's magnificent library of magical words--an auto-erotic metaphor for Shakespeare's own gift (*The Tempest*, as Shakespeare's last play, surely must permit some autobiographical criticism)--serves as the linguistic control mechanism that enslaves the 'savage' Caliban and the spirit Ariel. But Burroughs uses the metaphor to collapse the slavery of 'sullen Caliban' in the aural play of the 'smell of cannibas.' In a prime example of what Ronell might call getting language high, Burroughs subverts the metaphor with a metonymic punning--Caliban stands in for Prospero's (and Shakespeare's) linguistic mastery which dissolves in Burroughs' fragrant word play, a 'narcoanalysis' that burns metaphor into the sweet smoke of metonymy.

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[10] In *The Ticket That Exploded* Burroughs eradicates the metaphorical act of allusion into a metonymic cutting-in of Shakespearian text. Burroughs writes, "Drew tears down Pluto's cheek--a wall of water you understand--full fathom five--and still the words muttering and turning like dry leaves" (189) only to conclude Ariel's song, ten pages later, "Johnny Yen, in last good bye fading scars--played the flute in Ali--played the flute in Kiki--some clean shirt and man like good bye--ding-dong bell" (199). The conspiratorial narrative that transpires before the two poles of a Shakespearian poem is a parenthetical intertext that comments on Prospero's imperialist domination of language.

IV. Cut-Ups, Fold-Ins, and Prerecordings.

The effect of metaphoric language is like listening to an unfamiliar song on the radio, a song you've never heard before, and yet you seem to know all the words. The rhyme scheme and imagery just fall into place 'naturally'--against your will you find yourself whistling along. Burroughs takes the logic of popular music, which is the "pre-recorded" logic of metaphor (Ticket, 169), and goes for the jugular, slicing the arterial network of a language that reproduces itself through cliché, analogy, and repetition. The 'prerecording' becomes the target of the 'cut-up,' Burroughs' experimental assault on language. Burroughs writes:

> And like all virus the past prerecords your 'future.' Remember the picture of hepatitis is prerecorded two weeks before the opening scene when virus negatives have developed in the mirror and you notice your eyes are a little yellower than usual - So the image past molds your future imposing repetition as the past accumulates and all actions are prerecorded and doped out and there is no life left in the present sucked dry by a walking corpse muttering through empty courtyards under film skies of Marrakesh.
>
> (Ticket, 188-9)

The prerecording is the mirror of language in which the virus negatives of metaphor are devloped. The job of the writer is to shine a light into that reflective darkroom and sabotage the reality film *as it is developing*. As the infamous "Butterfly Effect" of chaos science demonstrates[11], all that is required to transform a simple system into a chaotic one is the introduction of a random variable. Burroughs turns to the analytic linguistic philosophy of Ludwig Wittgenstein for support: "Wittgenstein said: 'No proposition can contain itself as an argument' = The only thing *not* prerecorded in a prerecorded universe is the prerecording itself which is to say any recording that contains a random factor" (Ticket, 166). Burroughs' experimental cut-ups (a distant relative to the Dada strategy of drawing poetry from a hat employed by Tristan Tzara) introduce a random factor by literally slicing apart texts, rearranging them, and then reading closely for associational effects in the arbitrary juxtaposition of words. More than a simple exercise in aesthetic elitism, however, the cut-ups provide the gimmick by which Burroughs writes his most sophisticated routines; under the guise of a vaudeville scheister sticking swords into a box, Burroughs conducts a systematic dissection of cultural codes.

Burroughs' cut-up or 'fold-in' method draws the requisite attacks from literary critics for whom the splicing of language is a decontextualization that should be protected by plagiarism laws. This 'critical' voice is paralleled in the music industry in the form of the ridiculous royalties charged on sound bites sampled into new songs, a controversial postmodern form of "remaking" that owes more to strategies of pastiche than recording technologies.[12] These puritan critics are directly descended from those who attack cubist painting as aesthetic obscenity. The pieced-together prose of Burroughs' cut-up novels does indeed resemble Picasso's finest work in its ability to extend and explore perception with little regard to narrative continuity or unified perspective. Burroughs' cut-ups perform the same kind of schizo-fragmentation of the reading subject as cubist art performs on the viewing subject, jarring the senses from their conditioned configuration. Burroughs, as carnival barker, literally *cons* his *figures* from the endless flow of words that constitutes the print economy. It is naive to believe that the thousands of tons of paper stamped with words each and every day for the last three centuries has only a minor effect on the configuration of the collective illusion 'reality;' whether or not all existence is constituted linguistically, surely the pure mass of Gutenberg culture casts a powerful vote.

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[11] For those unfamiliar with chaos theory, complex sytems math, and Heisenberg's uncertainty principle, the "Butterfy Effect" first emerged from the science of meteorology which discovered that all systems are interconnected, and that the slightest change in one system can produce monstrous effects in another system, ie. If a butterfly flaps its wings in New York, a typhoon swells up in Tokyo. Burroughs anticipates this 'effect' in his attack on the Language Virus, and in his notion of 'prerecordings.' Chaos and Complexity Theory is something I will return to in much greater detail in a later chapter on the viral frequencies of Mass Media.

Burroughs not only demonstrates a handy proficiency at editing this mass, he is, primarily, an avid and sophisticated *reader* of popular culture. His novels are littered with snips of advertising jargon (Burroughs himself worked briefly in advertising), popular songs, and pulp fiction cliché (*Junky* was first published as an Ace Paperback). This *bricollage* of cultural codes forms the collective word mass from which Burroughs can extract the most bizarre (or the most trivial) of anecdotes. In *The Ticket That Exploded* the author offers a peek at the process behind his writing, "Of course I cut in bulletins from [Operation] Rewrite with all popular songs using music as punctuation (Singing came before talking)--I folded the bulletins in with newspapers, magazines and novels--I put them out mixed with street sounds and talk wind and rain and lapping water and bird calls--Well--Word evokes image--&%$$ "N:?" " (Ticket, 169). Burroughs description of his cut-up process is eventually cut up itself by the seemingly random symbols at the end of the sentence. The juxtaposition of words evokes an image that is itself encrypted within an arbitrary code (reflecting a Saussurian conception of language gone awry). Meaning, however, does not dissolve with the cut-up method; rather, it is synthesized with other contexts from other texts--a melting down of metaphor into a metonymic language marked by the synecdochic reduction of textual meaning into a collage of contiguous meaning; the part literally stands in for the whole--Any paragraph from Joyce can be isolated and extracted as a genetic fragment which carries a micro-conception of the diction, grammar, and style that constitutes Joyce's approach to language, the same could be said about Shakespeare, or even Stephen King. In weaving together texts, Burroughs pays careful attention to the metonymic effects which are created by random juxtaposition, evolving the intertextual to a true conversation between texts. Burroughs discovers that words in a text act like a bucket of magnets: everytime you pull them apart, they lock together again in new combinations that are governed by an internal logic of attraction.

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[12] For example, the case of Irish superband U2--a hugely influential force in postmodern music and film--and their lawsuit against the minor American cult band Negativeland. After two young teenagers (under the influence of LSD) killed themselves while listening to a Negativeland album, the band borrowed the newspaper headline/photo for their next album cover. U2, charging that Negativeland sampled (plagiarized) a U2 riff in one of their songs, offered the band the choice of huge legal fees or an agreement to disband immediately. Such moral censorship has become unbearably integrated in the economic monopolies of popular culture.

Burroughs soon realized that his experiments were limited by the boundaries of the printed word and expanded his work to the (then) new technology of the personal tape recorder, a revolutionary device in the history of language (which has spawned a proliferating economy of 'audio books' that now threatens the entire print industry). Burroughs 'prerecords' Marshall McLuhan when he writes, "A tape recorder is an externalized section of the human nervous system. You can find out more about the human nervous system and gain more control over your reaction by using a tape recorder then you could find out sitting twenty years in the lotus position. Whatever your problem is just throw it into the machines and let them chew it around a while" (Ticket, 163). From the confessional to the couch and now to the tape recorder, the new spirituality has been technologized in a compact form of self-analysis, repossessing the act of cultural recording from the traditional power base of historians, philosophers, and psychiatrists. The writer that understands the rush of new technologies of perception (the Nova Express) enters into a symbiotic relationship with technology, becoming a parasite on the surface of language that proliferates according to its own internal logic at a viral pace. All linguistic relationships are parasitical; the writer that consciously identifies as parasite at least enters into the bargain with her eyes open, rather than suckling blindly for the nearest teat.

Burroughs expands on the applications of recording technology: "a tape recorder can play back fast   slow or backwards   you can learn to do these things   record a sentence and speed it up   now try imitating your accelerated voice   play a sentence backwards and learn to unsay what you just said... such exercises bring you a liberation from old association locks" (Ticket, 206). This disruption of the temporal dimensions of language magnifies linguistic processes to a slow-motion replay of cognitive production. Like a quantum physicist with his electron microscope, the technological writer can analyze, isolate, and deconstruct the most primitive signifiers to reveal their control functions. In *Nova Express* Inspector Lee confronts the Board, a bureaucratic organization controlled by the generic Mr. Bradley Mr. Martin:

> There is a cool spot on the surface of Venus three hundred degrees cooler than the surrounding area. Now you expect to use me as your 'errand boy' and 'strikebreaker' summoned up by an IBM machine and a handful of virus crystals? How long could you hold that spot, you 'board members'? About thirty seconds I think with all your guard dogs. And you thought to channel my energies for 'operation total disposal'? Your 'operations' there or here this or that come and go are no more. Give my name back. That name must be paid for. You have not paid. My name is not yours to use. Henceforth I think about thirty seconds is written.
>
> (Nova, 22)

Lee's tirade in the board room gradually breaks down into simple, repetitive sentences that stretch out the speech until the last line in which Lee records/writes the *time* of language, exposing the illusion of timelessness within text. It is as if Lee is stalling his audience, listening carefully to the countdown of a prerecorded time limit at the same time as his style dissolves into barren simplicity. The effect of the package is similar to the effect of Brecht's theatre of alienation: Brecht could not have achieved his alienating effects without the background technology of film, a technology which replaces the dimension of depth with the dimension of time (the clickclickclick of the camera's shutter echoes the ticktickick of the clock)--similarly, the technology of the tape recorder enables Burroughs to approach writing as a temporal process, a consumption and production, a *digestion* of time.

However, as that pioneering work of atomic physics known as the Manhattan Project proved, the manipulation of atomic particles can yield disastrous effects.

Burroughs warns "Spliced tape and film may or may not give rise to virus forms--(*Warning: experiments with spliced tape and film are dangerous* parenthetically)" (Ticket, 164). The parentheses here recall Burroughs' "antibiotic handcuffs" (Nova, 83)--a textual containment field that functions as a literary version of a biohazard space suit. The italics warn that we are now at the red level--linguistic meltdown--strobing Chernobyl skies--needle flashes binary hot from red-white read-write. Metonymic overload in three too 1... CONTAINMENT STABILIZED. The same safety precautions are observed when Burroughs describes metaphor as the libido of language: "(The concomitance or rather juxtaposition with this relentlessly successful though diagrammatic schemata by sexualizing syntactically delinquent analogous metaphor)" (Ticket, 27). Writing with a disdain for continuity, order, and rhythm, the patterns begin to reveal themselves beneath a stream-of-consciousness test signal, almost as if Burroughs is channeling the reflexive logic of language itself. This "relentlessly successful schemata" is "prose abstracted to a point where no image track occurs" (Ticket, 27). Although Burroughs is referring to a newstand copy of *Encounter*, the paranthetical aside achieves this negation of the image track, cloaking the words in the blinding light of pure literalness.

However, Burroughs' text is nothing if not a mirror for the writer to contemplate his own position; the consumate professional, Burroughs recognizes that such an escape is illusory, a textual trap that threatens to reappropriate new subjectivities within the collective: "(foundering in disproportionate exasperation he doesn't even achieve the irrelevant honesty of hysteria but rather an uneasy somnolence counterpointed by the infantile exposure of fragmentary suburban genitalia.)" (Ticket, 27). During this 'routine' the author's pulse never even quickens, the heart beats the same cautious rythym on the page, and Burroughs is left contemplating the fetishism of the status quo, a demographic effect of the language virus. Burroughs never breaks the isolation seal, never lifts the brackets to let these words into the main artery of the text, but rather keeps them contained in their elliptical test tube, another language experiment failed in the dark. The tension between experimental proliferation and narcissistic self-destruction is the danger within the tape-recorder experiment. Burroughs approaches his work with the utmost sensitivity to detail and concern for consequence; he knows it's a serious game and he's been keeping score for a very long time. Burroughs wises up the rubes: "the techniques described here have been used and are being used by agencies both official and non-official without your awareness and very much to your disadvantage" (Ticket, 215). Those who control the recording can rewrite or edit history (witness Rob Lowe porno, Rodney King, and Mark Fuhrman). Watergate, the symbolic deconstruction of the presidency (Richard Nixon as Humpty Dumpty), was a tape recorded trial, a prerecorded investigation, a *bugging* of history.

The technologized image becomes a major concern in *Nova Express*. The Subliminal Kid, galactic child star of the electronic era gets his batteries charged by sampling reality in small bytes, mixing and re-mixing, projecting a fractured image on the reality screen. The Subliminal Kid is the truly technological body, a Pynchon-like model of integration that consumes image, digests signifiers, excretes a simulated waste onto the simulacrum. Burroughs begins the chapter "Pay Color" with a manic account of a simulation attack. Wait a second... (hand to my ear)... THIS JUST IN:

> "THE SUBLIMINAL KID" moved in and took over bars cafés and juke boxes of the world cities installed radio transmitters and microphones in each bar so that the music and talk of any bar could be heard in all his bars and he had tape recorders in each bar that played and recorded at arbitrary intervals and his agents moved back and forth with portable tape recorders and brought back street sound and talk and music and poured it into his recorder array so he set waves and eddies and tornadoes of sound down all your streets and by the river of all language--Word dust drifted streets of broken music car horns and air hammers--The Word broken pounded twisted exploded in smoke--
>
> *Word Falling ///*
>
> He set up screens on the walls of his bars opposite mirrors and took and projected at arbitrary intervals shifted from one bar to the other mixing Western Gangster films of all time and places with word and image of the people in his cafés and on the streets his agents with movie camera and telescope lens poured images of the city back into his projector and camera array and nobody knew whether he was in a Western movie in Hongkong or The Aztec Empire in Ancient Rome or Suburban America whether he was a bandit a commuter or a chariot driver whether he was firing a "real" gun or watching a gangster movie and the city moved in swirls and eddies and tornadoes of image explosive bio-advance out of space to neon--
>
> *Photo Falling ///*
>
> (Nova, 155-6)

Masterful science fiction or brilliant fictional science, either way you cut the deck Burroughs draws the high card (he has an Ace up his sleeve the size of a tumor). What Burroughs describes as the destabilization of society's reflection occurs nightly in the prime-time mirror of the screen--a bizarre photomontage of juxatposed images--a televisual dose of schizo-culture. The code resonates of parody and yet Burroughs rejects the binary process of metaphor that provides the structure of parody. Believe it or not, the adventures of The Subliminal Kid is a sublimated prerecording of a diary entry; Burroughs actually followed this battle blueprint succesfully on several different occaisions. Considering himself a terrorist of the image Burroughs carried out "deconditioning" operations, as Barry Miles recounts:

> By 1972 Bill decided that his dissatisfaction with the Scientologists merited an attack on their headquarters. Bill carried out a tape and photo operation against the Scientology Center at 37 Fitzroy Street, in London, and sure enough, in a couple of months they moved...
>
> The best example was an operation carried out against the Moka Bar... The reason for the operation was "outrageous and unprovoked discourtesy and poisonous cheesecake." Bill closed in on the Moka Bar, his tape recorder running, his camera snapping away. He stood around outside so the proprietor could see him. "They are seething in there. The horrible old proprietor, his frizzy-haired wife and slack-jawed son, the snarling counterman. I have them and they know it."
>
> Bill played the tapes back a number of times outside the Moka Bar and took even more photographs. Their business fell off and they kept shorter and shorter hours. On October 30, 1972, the Moka Bar closed and the premises were taken over, appropriately, by the Queen's Snack Bar.
> (Miles, 174-5)

The attack on Scientology capped a long investigation by Burroughs. Fascinated by Wilhelm Reich's "orgone accumulators" (Nova, 17n, Ticket, 69)-- metal-lined devices filled with organic material--Burroughs held a similar interest in Scientology's engrams and E-meter (Miles, 173)--a device that acts like a neurological allergy test, measuring the electro-chemical reactions to specific words. Hubbard's 'scientological' machines have since proven to be fraudulent (and highly overpriced). Burroughs took it upon himself to play 'monkey-wrencher' against the corporate theology of Scientology (which has recently begun a 'theological' monopolization of Hollywood celebrities in a culture that designates the church not as a place of worship, but as a tax-shelter). For Burroughs, the politics of language (the replication of Image) is not confined to the printed text, but rather extends from the subtle dangers of scientological discourse to the everyday threats of "poisonous cheesecake" and obnoxious service. If Word is a virus that attacks the individual nervous system like a linguistic allergy, Burroughs mobilizes his recording array as a semiotic serum that attaches itself parasitically to Language metabolism; the self-conscious writer must become a counter-virus which restores doses of autonomy to linguistic subjects.

As the cut-up experiments progress, Burroughs often shifts his attention from Word to Image, targeting the corporate manipulation of signs that is the mass medias. In a 1963 interview for the *Guardian*, Burroughs theorizes a conspiracy metaphor between the Time/Life/Fortune publishing empire of Henry Luce and the CIA:

> [Luce] has set up one of the greatest word and image banks in the world. I mean, there are thousands of photos, thousands of words about anything and everything, all in his files... Of course, they're reduced to micro-photos now. I've been interested in the Mayan system, which was a control calendar. You see, the calendar postulated really how anyone should feel at a given time, with lucky days, unlucky days, et cetera. And I feel that Luce's system is comparable to that. It's a control system. It has nothing to do with reporting. Time/Life/Fortune is some sort of police organization.
> (Miles, 130)

Having worked briefly in advertising, Burroughs is aware that the industry operates somewhere between an art and a science, manipulating consciousness through aesthetic techniques encoded in a scientifically formulated prescription of values. In a section of *Nova Express* called "Will Hollywood Never Learn?" Burroughs writes, "Electric storms of violence sweep the planet... Leaders turn on image rays to flood the world with replicas" (Nova, 70). As the signal synchronizes every screen to the same frequency Burroughs sends out a call to arms:

> THIS IS A WAR TO EXTERMINATION. FIGHT CELL BY CELL THROUGH BODIES AND MIND SCREENS OF THE EARTH. SOULS ROTTEN FROM THE ORGASM DRUG, FLESH SHUDDERING FROM THE OVENS, PRISONERS OF THE EARTH COME OUT. STORM THE STUDIO.
>
> (Nova, 67)

The goal of the plan is nothing short of "Total Exposure" of "The Reality Film giving and buckling like a bulkhead under pressure and the pressure guage went up and up. The needle was edging to NOVA" (Nova, 67). The reality film studio, otherwise known as the Nova Ovens, is a fascist laboratory of the image. The mission Burroughs outlines (should you choose to accept it) is straightforward enough:

> You are to infiltrate, sabotage and cut communications--Once machine lines are cut the enemy is helpless--They depend on elaborate installations difficult to move or conceal--encephalographic and calculating machines film and TV studios, batteries of tape recorders--Remember you do not have to organize similar installations but merely to put enemy installations out of action or take them over--A camera and two tape recorders can cut the lines laid down by a fully equipped film studio.
>
> (Ticket, 111)

The answer lies not in reproducing a technological apparatus to rival the control of image, but rather in taking control from the inside, monkey-wrenching the image, disguising counter-viral messages under the surface of the screen--in other words, the seizure of the media that Burroughs advocates is the infiltration of micro-political actions. Burroughs' alarm has not gone unheard; as we will see in a later section, media activism has situated itself on the inside of information networks, working consciously and earnestly to transform the Image into an interactive, *hypertextual* sign.

David Cronenberg: Cinematic Parasite

The cinema of David Cronenberg, from his first film *Shivers* (1975)--also released as *Orgy of the Blood Parasites*--to his latest film *Crash!* (1996)--after J.G. Ballard's novel of the same name--constitutes an evolution of the diseased image. Saturated with the influence of William S. Burroughs, Cronenberg's most impressive talent is one of translation. Cronenberg's unique cinematic style is, essentially, an act of reading; a digestion of Burroughs' literary fascination with Virus that is processed in the form of the celluloid image, a kind of cathartic translation which enables Cronenberg to achieve the escape from the written word which Burroughs never allows himself. Like Burroughs, Cronenberg locates a critical, counter-cultural sexuality in the cancerous meltdown of the twentieth century body. Cronenberg's obsession with the revolutions of the flesh, however, takes place not only in the squishy, visceral realm of biological horror, but also in the cold, hard spaces of technological society. In a world where machines have become practical extensions of the organic body, Cronenberg's films solidify the metaphor of the technological body into actuality; the body becomes the site of a techno-diseased desire--an alchemical synthesis of flesh and steel. The problematic relationship between mind and body is further complicated by the invasion of technology--the dualisms of traditional horror film-making (the psychological vs. the visceral, the monster within vs. the predator without, etc), are expanded into complex systems by a contaminating technology. Carrie Rickey declares Cronenberg to be "a visionary architect of a chaotic biological tract where mind and body, ever-fighting a Cartesian battle for integration, are so vulnerable as to be easily annexed by technology" (Rickey, 64). Rickey's observation is important, and yet too simplistic. Technology, in Cronenberg's films, is not a predatorial force that preys on the weakened boundaries of mind and body; rather, technology is the industrial by-product of the Cartesian struggle for identity--a man-made junk that remakes man in its own image. Technology is the Cartesian word made flesh, the manifestation of an evolutionary desire to understand and overcome the opposition of intellect and flesh. Technology is not, however, merely the synthetic medium of mind and body in a historical dialectic; rather, technology expands the process of dialectic into *trialectic*[13], a three-dimensional configuration in which to understand the collision of forces in a technocratic culture freed from the dualings of history. Technology insinuates itself somewhere *between* mind and body: like a virus attaches itself to a protein and teaches it to reproduce mutated cells, technology anchors itself to conceptions of human conflict, to metaphysics, to epistemology, insisting that a third perspective be added to the evolving human condition (mind, body, *tools*). The drug-induced hallucinations of the imagination become physical realities when mediated by the experimental tools of an expanding and colonizing techno-capitalism. Cronenberg's films are far from techno-phobic panic cinema, however; rather than rejecting technology's invasion of the flesh, films like *The Fly* (1986) and *Naked Lunch* (1992) encourage and invite the evolution of techno-bodies with the concerned eye of the scientist watching over his experiments.

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[13] Or, as Scott Bukatman argues for the term, Trichotomy: "The dissolution of identity into new forms is increasingly posited as a consequence of contemporary existence, connected to the rise of new technologies. This has become greatly evident in three films: *Scanners* (1981), *Videodrome*, and *The Fly*, in which the apparent mind/body dichotomy is superseded by the *tri*chotomy of mind/body/machine" (Bukatman, 82).

These experiments resonate self-reflexively when one considers Cronenberg as a cinematic parasite attached to the word horde of William S. Burroughs. Like the parasitic suction between technology and culture, Cronenberg's feeding (off) of Burroughs is closer to a symbiotic relation; rather than draining Burroughs' texts into image, Cronenberg manages to infuse new life into an image virus that jumps species from a linguistic code of association to a filmic semiosis that derives expression from juxtaposition. The cut-up method of Burroughs finds a powerful climax in Cronenberg's "spliced film" language. An example of Burroughsian dissociation can be found in the opening scene of *Shivers*: the film begins with an apparently psychopathic old man chasing a young woman in school uniform around an apartment. After knocking her senseless and stripping her naked, the man makes an incision in her abdomen--an expression of the most extreme paedophilic penetration. As the audience cringes with the extremity of the image, it is revealed that what is presented as the depraved desire of a sexual predator is in fact a scientist's final attempt to destroy an out-of-control experiment. The would-be rapist is the esteemed Dr. Hobbs, a professor of venereology and psycho-pharmacology, who has determined that "man is an over-rational animal that's lost touch with its body and its instincts" (playing on the philosophy of Thomas *Hobbes*). Having engineered "a parasite that's a combination of aphrodisiac and venereal disease, a parasite that can do something useful--a parasite that can take over the function of a human organ," Hobbs soon realizes that as the libidinal prosthesis spreads from body to body it gathers a carnal momentum--an accelerating rhythm of infection and impregnation--a rhythm which quickly mutates into anarchic lust and inbreeds a sexual chaos. The initial sequence in which Hobbs assaults the young woman reverses the standard metaphor of predator and prey, insisting that the audience accept the inverted scenario of science-as-alien-attacker and virus-as-victim. In attempting to establish a semiotic domain for the film, the audience must choose between adopting a sympathy for the parasite or condoning the violence of cross-generational rape. Cronenberg borrows Burroughs' strategies of dissociation by playing with the already institutionalized language of imagery to produce bizarre new alliances. In *The Ticket that Exploded* Burroughs writes, "('You see the angle, B.J.? a nice virus.. beautiful symptoms.. a long trip combining the best features of junk hash LSD yage.. those who return have gained a radiant superhuman beauty..!)" (Ticket, 19). Hobbs' experiment to create a "nice virus" backfires because of his under-estimation of the untapped potentials of the human libido. But for Cronenberg the experiment of *Shivers* is wildly successful; as the virus-saturated cars drive one by one from the apartment parkade at the end of the film, the hosts have indeed gained a "radiant superhuman beauty," at least from the perspective of the virus, the perspective that Cronenberg desires all along. As the ingenuous nurse declares, after her infection, "disease is the love of two alien kinds of creatures for each other; even dying is an act of eroticism"; Cronenberg has succesfully managed to produce parasite pornography, the sexuality of disease that is transmitted through the expression of a viral libido.

In *Rabid (1976)*, Cronenberg 'borrows' the concept of "Undifferentiated Tissue" from *Naked Lunch*, "[tissue] which can grow into any kind of flesh on the human body. He would tear it off his mouth and the pieces would stick to his hands like burning gasoline jelly and grow there, grow anywhere on him a glob of it fell" (Lunch, 120-1). Rose, played (ironically) by porn star Marilyn Chambers, awakens after a horrific auto crash in the Keloid Clinic, one of a planned series of franchised plastic surgery resorts. The cosmetic technologies that breed plastic and flesh into a glossy shine that mirrors (and reinforces) contemporary values has produced a clinical process know as neutral field graft tissue (Burrough's "un-D.T."). Burroughs writes:

> That's the sex that passes the censor, squeezes through between bureaus, because there's always a space *between*, in popular songs and Grade B movies, giving away the basic American rottenness, spurting out like breaking boils, throwing out globs of un-D.T. to fall anywhere and grow into some degenerate cancerous life form, reproducing a hideous random image. Some would be made of penis-like erectile tissue...
>
> -(Lunch, 121)

Rose awakens with just such a penile organ concealed in a vaginal slit under her arm. More importantly, however, Rose wakes from her month-long coma with a need to feed; like a grotesquely sexed heroin baby Rose is (re)born into a junky's body, reduced to a feverish hermaphrodite held down by the restraints of a pharmaceutical drip. As Rose explores her new sexual hunger this phallic organ comes to look less like a penis and more like a syringe. Rose plunges it into men and women without discrimination, displaying the symptoms of a venereal sexuality that doesn't recognize the artificial categories of sex, only the exquisite pleasures of a viral promiscuity. Unfortunately, as in *Shivers*, the technological manipulation of the sexual body produces a plague of rabid zombies that ravage Montreal. As piles of victims accumulate in the streets, plague sanitation workers in quarantine gear prowl the city in garbage trucks to collect the bodies. The postmodern metropolis has been transformed into the chaos of urban decay, recalling the familiar cries of "Bring out your Dead!" that chimed through London during The Black Plague.

The idea of pregnancy as virus, the invasion of the body by an alien other in parasitic relation, becomes the primary theme of *The Brood* (1979). In *Cities of The Red Night*, Burroughs recounts a wave of reproductive disease: "how some of these mutant pregnancies were contracted is unknown to modern science. Immaculate or at least viral conception was pandemic and may have given rise to legends of demon lovers, the succubi and incubi of medieval folklore" (Cities, 20). In *The Brood*, Nola, a psychologically frustrated woman suffering within a cycle of maternal abuse, is registered at Dr. Raglan's clinic, undergoing intensive psychoplasmic therapy. The basic process of psychoplasmics teaches the patient how to give vent to their deepest psychosis by literally *embodying* affect as a symptomatic disease ~~which can~~ then be treated. Nola's psycho-sexual pain becomes embodied in a fantastic organ of reproduction, an exterior womb that gives birth to a brood of murderous clones. Pregnancy is mutated psychoplasmically, transforming the maternal body into a self-reliant cloning machine which patches the Cartesian gap between mind and body. In *Naked Lunch* Burroughs describes The Divisionists: "They cut off tiny bits of their flesh and grow exact replicas in embryo jelly... Replicas must periodically recharge with the Mother Cell... To avoid extermination of their replicas, citizens dye, distort, and alter them with face and body moulds... It may be said that the average Divisionist lives in a continual state of fear and rage" (Lunch, 149, 151). Nola's army of plastic-faced, sharp-fanged replicas provide a buffer zone to distance herself from the cycles of abuse that have passed from mother to daughter for generations, an abuse that punishes and stigmatizes the female body as host to a parasitic, psycho-sexual rage.

The release of *Scanners* (1980) marks Cronenberg's breakthrough into the American market. As a psychological sci/fi action/adventure film, *Scanners* has spawned at least three generic sequels, proving itself to be somewhat of a virus within the genre. One of the most striking things about the film is Howard Shore's score--as the film opens the soundtrack defines an anonymously urban environment, combining a strange, primordial soup of digital whale music with random buzzing and computer beeps. String melodies are infested with the white noise of the electronic age, a symphony expanded to accomodate the technological 'instruments' that sing with the feedback of electronic information processing. As the derelict Cameron Vale wanders through the compacted, simulated spectacle of a modern shopping mall scavenging for food, the music thins to a jumbled medley of voices, a random sampling of street noise, that exists as one unedited voice in Vale's head. As Vale awakes, much like *Rabid*'s Rose, strapped to a bed in an observation room, fragments of mental conversations plague Vale like the chaotic whine of a radio scanner reporting multiple frequencies on the same bandwidth. One cannot help but think of Burroughs tape-recorder experiments and the sampling/editing of reality by technological memory. The crucial difference in Cronenberg's mutation of Burroughs' work is that the voices are audible within Vale's head, performing a kind of synthesis between consciousness and technology. Dr. Paul Ruth, The Consec Corporation's head of research addresses the audience, referring to Vale as "a piece of human junk." Not only is he societal junk, a broken and lost part of a collective machine, Vale is also in a state of terminal junk sickness. Born addicted to the fertility drug 'Ephemerol,' a Scanner's abilities for psychic warfare are the withdrawl symptoms of a pharmaceutical dependency in search of another high. Red-robed scientists assist the black-cloaked Dr. Ruth as he administers the drug to Vale, a ritual injection suggesting the Catholic Inquisition, itself a desperate war for control of a viral theology rapidly being made redundant. Ruth explains that Scanners are "freak[s] of nature, born with a certain form of e.s.p., the derangement of the synapses which we call telepathy. Could be a disease possibly, or the result of radiation, we don't really know." Dr. Ruth's lie (scanning is actually the effect of a chemical contamination) passes without protest because there is no fundamental difference between modern disease and the industrial side-effects of modern living. Technology produces its own diseases; radiation is only the immune defense of manipulated nature.

Scanners find its source in the 'Senders' of *Naked Lunch*. Burroughs writes, "The biocontrol apparatus is a prototype of one-way telepathic control. The subject could be rendered susceptible to the transmitter by drugs or other processing without installing any apparatus. Ultimately the Senders will use telepathic transmitting exclusively" (Lunch, 148). The pharmaceutical conspiracy of *Scanners* relies on a similar, ephemeral [14]conditioning wherein technology operates on the level of fractal, viral micro-processes rather than the external, larger than life level of the machine. Technocratic control in *Scanners*, as in Burroughs, operates through psychic junk, as becomes clear in Vale's encounter with his dialectical other, his powerful brother Revok. In a brilliant montage sequence early in the film, Cronenberg's juxtaposition of institutional control, psychopathic power, and the 'fetishistic scopophilia' of the camera is established through clever editing. As Vale confesses his scanning to Ruth the camera view cuts to fuzzy video, then to Consec security chief Keller scanning them by surveillance camera; the technological innovations of electronic media struggle to keep pace with the mutating technologies of the organic brain. This scene also suggest Burroughs' warning regarding tape recorder experiments: "the techniques described here have been used and are being used by agencies official and non-official without your awareness and very much to your disadvantage" (Ticket, 215). Vale, with his internalized technology, must ultimately defeat the tools and machinery of corporate science to win freedom of will.

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[14] In an interview originally published in Mondo 2000, but reprinted on the Cronenberg Home Page, the director remarks, "One of our touchstones for reality is our bodies. And yet our bodies are by definition ephemeral. So to whatever degree we center our reality--and our understanding of reality--in our bodies, we are surrendering that sense of reality to the body's ephemerality. That's maybe a connection between *Naked Lunch*, *Dead Ringers*, and *Videodrome*. by affecting the body--whether it's with TV, drugs (invented or otherwise)--you alter your reality. Maybe that's an advance." The drug (invented) of Scanners is Ephemerol, a pharmaceutical expression of the

Immediately following the shot of Keller's panoptic surveillance, Vale and Ruth proceed to watch psychiatric film stock of Revok, once a mental patient diagnosed with acute schizophrenia. Revok fidgets with paranoia, glancing nervously around the room--the hole in his head--a self-inflicted drilling in order to let out "the voices"--is the third eye; a bloody tattoo that marks the organ of a synthetic vision. As the film cuts between Revok's wound and the eye of the projector the flickering lens parallels the brightly bandaged hole in his forehead. The technological eye of the camera scans with an even greater power than that of the mind; the camera *records* whereas the mind merely

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ephemeral body.

perceives. When Revok complains about the 'people' in his head the Doctor corrects him, "You mean voices?" to which Revok responds, "No. Whole people. Arms, legs, hands,... The eye is a door." Invoking the catch phrase of psychedelic drug culture, "the doors of perception," Cronenberg draws associations to Aldous Huxley, Timothy Leary, Allistair Crowley, while playing off the main-stream fascination surrounding the figure of the mental patient, an inhabitant of another kind of reality. The camera offers both a portal into diseased consciousness as well as the technological manipulation of a 'prerecorded' reality. Cronenberg's camera is once again a metonymic parasite that stands in for Burroughs' type-writer and tape recorder technology.

In a letter to Ginsberg dated June 18, 1956 Burroughs writes, "I have thought a great deal about schizophrenia. Convinced that it is as much a disease of disturbed metabolism as diabetes... Now fix yourself on this: the terminal state of addiction is quite similar to the terminal state of S." (Letters, 321). Referring to schizophrenia as "a drug psychosis" (322), Burroughs formulates the fragmentation of the ego as an addiction to madness, withdrawl producing psychosis. Frederic Jameson, following from Lacan's description of schizophrenia as a breakdown in the signifying chain, maps out a symptomatic postmodern aesthetics (Jameson, 25-31) that is the result of an image system that has reached critical mass. The aestheticization of schizophrenia as an industrial side-effect of a junked-up culture is explored brilliantly in *Scanners* through the figure of the tortured artist Benjamin Pierce; Pierce, after killing his entire family, was paroled as a result of "rehabilitation through art." The influence of a violent aesthetics is seen to work both ways; in response to the suggested causality between violent imagery and violent behaviour stressed by puritanical and parental censor boards, violent imagery also serves as a cathartic escape from the pressures of postmodern, schizophrenic consciousness. At Pierce's gallery, Vale admires a sculpture of a screaming head, long red tendons stretching from the skull, each extended synapse anchoring another screaming head in an umbrella above him. The brain has been physically, as well as metaphorically unwound, its neural fibres pulled and stretched in new directions, providing the sculpture with a concrete configuration which is more powerful than the metaphorical, metaphysical analogies of mind-control ("You're getting verrrry sleeeeepy..."). When Vale comes to visit Pierce at his home/studio, the two climb inside a giant, hollowed-out, plaster head in order to speak privately. Vale eagerly explains, "I'm one of you," to which Pierce responds with genuine curiosity, "You're one of *me*?" In the fragmented consciousness of the scanner the perspectives of second-person singular and plural are as indistinguishable from each other as they are from the first-person; the psychic breakdown of self extends to the linguistic center of the mind, constantly reconfiguring language to express a technologically accelerated sense of identity. Vale confesses in a panic, "It's the voices in my head, they're driving me crazy," to which the professional psychopath responds, "My art keeps me sane." Pierce taps the ceiling of the sculpture, the *inside* of a skull, speaks the word "art," then taps his own temple, the *outside* of his own skull, concluding the demonstration with the word "sane." Following a McLuhanesque logic that extends the boundaries of consciousness, Cronenberg attacks the artificial borders of interior and exterior, reducing such philosophic concerns into an aesthetic experiment, a physical 'work of art' that contains a fractal consciousness.

When Vale discovers that the production of Ephemerol has been "computerized," he fears that the problem is beyond his powers. Ruth dismisses such concerns: "you *do* have a nervous system. So does the computer. And you can scan the computer just as you would a human being." Vale uses a public telephone to connect with the Consec computer, transforming himself into an organic modem to interface electronically with the corporate brain. The sequence moves from a shot of Vale on the phone to a super close-up shot of the phone's circuit board, its brain. As the camera moves across circuits and transistors, tracking the electronic extensions of Vale's consciousness, it finally arrives at the Consec computer screen. The screen--the flat, digital space of the terminal (that Scott Bukatman theorizes in *Terminal Identity*)--has become an extension of subjectivity. Vale, with his electronically-extended mind, is a pioneer of the cyber-cowboy character (now canonized through the cyberpunk writing of William Gibson and Bruce Sterling), inhabiting the early frontiers of an unmapped cybernetic space. As Keller tries to disconnect the link between Vale and the computer, the Consec computer room erupts in a series of explosions. The melting phone and smoking machinery serve as a reminder that the human brain is still the most complex and mysterious machine ever invented; the hard technology of the computer terminal is overwhelmed by what Burroughs calls 'the soft machine,' or 'the Human Virus'--the organic technologies of the human mind.

Douglas Kellner breaks the genre 'cyberpunk' down into its roots--cyber=control, punk=antiauthoritarian-- arriving at a definition of the aesthetic movement: "Together the terms refer to the marriage of high-tech subculture with low-life street cultures...

[producing] technoconsciousness... which merges state-of-the-art technology with the alteration of the senses, mind, and lifestyles associated with bohemian subcultures" (Kellner, 301). Working with this definition it is clear that Cronenberg's masterful film *Videodrome* (1982) is a pioneering work of the cyberpunk genre. *Videodrome* synthesizes the concerns of Cronenberg's earlier *panic* films in the form of a media conspiracy that comments reflexively on the viral power of Image. Max Renn, owner and operator of Civic TV, is Cronenberg's cinematic double (he even tries on a pair of Cronenberg's trademark thick spectacles at one point in the film), a producer of violent and erotic imagery for public consumption. If Burrough's *Naked Lunch* "treats of vast Kafkian conspiracies, [and] malevolent telepathic broadcast stations" (Letters, 269), then surely Videodrome treats of vast *Burroughsian* conspiracies, nurtured on the energy of McLuhan's media philosophy. Arno Karlen has applied McLuhan's theory of informational velocity to biology--"High-speed travel has created a global village for pathogens" (Karlen, 7); Cronenberg applies this model of contagion back to information networks, demonstrating the terrific potentials of Media Virus. The collapsed geography of Media inbreeds technologies, reinvents its own origins, synthesizes and distributes affect along digital lines of imagery, and reduces Word to the almost microscopic level of the pixel. It is within this digital realm that the action of *Videodrome* takes place--a simulated videoreality that combines hallucination with epiphany in its construction of a videated body and a digital consciousness. *Videodrome* is *about* Virus at the same time that it *is* Virus, a complex doubling that can only occur in the diagetic space of tape recorder experiments; Cronenberg's film is itself a tape recorder experiment out of control, the extreme saturation of the recorded image.

The film opens with a video alarm going off: "Civic TV--*The one you take to bed with you.*" City TV programs soft-core pornography and simulated sex for a cable subscription audience lost in the eroticism of the screen; it is television that establishes a sexual relationship with its viewers, operating both as a mirror and a window into the bedroom of the consumer. Max argues that his station provides a harmless outlet for sexual aggression, following the insipid logic of 'Better on the screen than in the flesh.' This is a very dangerous prejudice; as Max discovers in the videodrome format--a simulated videoflesh that bites back--on the screen *is* in the flesh. Max regards the television screen as a reflective medium that absorbs and mediates violent desire through violent imagery, a kind of therapeutic technology. This desire is reinforced through sleazy daytime talk shows and steamy primetime cop shows which function as both aphrodisiac and foreplay. Describing a video installation piece by Mit Mitropolous in which individuals converse through the mediating technology of closed circuit television, Derrick De Kerckhove writes, "TV voyeurism is the 'uncensored gaze,' a relationship devoid of the politics of eye contact" (Kerckhove, 14). *Videodrome* establishes a media sexuality that reflects a fundamental lust for the two dimension image, an erotic commodification of simulated bodies that is an early relative of the current middle-class addiction to 'cyber-sex.'[15] Max longs for something harder to feed his televisual appetite, current programming is "too soft" and Max desires "something that will break through... something tough." Max wants to unmediate his sexual relation to Image, he wants to be penetrated by the Image, to feel the videoword pulsating inside him. This compulsive desire for penetration eventually takes the form of a vaginal slit in his abdomen, a videomouth that moistens in anticipation of the insertion of the tape.

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[15] Cyber-Sex, with its steamy labyrinth of chat rooms, is like a bath house of language, providing users the promiscuous courage of anonymity. Sexuality is reinvested within a hyper-textual language, the body dissolves from public spectacle to auto-erotic simulation as the user interacts, not with another user, but with the simulated curves of

The tracking shot of *Scanners* that charted a move from the external world to an electrified inner space spawns a similar shot in *Videodrome* that reverses the direction of the signal. Max's wish for something 'harder' is followed by a tracking shot which pans across a rooftop to a satellite dish, cuts to a close-up of a radio antennae, then fades to a shot of wires running to tape reels. The camera has entered the station like an electronic virus, downloading itself onto the magnetic surface of a videotape. Harlan, Max's resident video pirate removes the videodrome signal on video format, completing a translation of the digital signal through radio waves into the contained imagery on a video cassette. All this, as is later revealed, is an elaborate illusion, both on the part of Harlan and on the part of Cronenberg, an illusion to convince the audience that the virus is actively broadcasting. In actuality, the signal is safely contained on videotape, prescribed experimentally to carefully-chosen users in preparation for full-band broadcast, just as Cronenberg's film represents the containment of its imagery in a commodified, easily distributable format. As Max stares, hypnotized, at the videodrome screen, Harlan is careful to look the other way, to avoid being infected by the pattern operating beneath the

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the computer screen.

violent imagery. Infection quickly sets in and Max becomes addicted to the videodrome signal, a junky at the mercy of the vibrating skin of the cathode ray tube.

Marshall McLuhan's writing is invested with that strange, intangible Canadianness that positions him in the envious critical position outside of the American media machine. McLuhan writes of the awkward print bias that inhibits BBC and CBC programming as opposed to the "commercial urgency" that creates a "hectic vivacity" in American media (Understanding, 307). Whereas Canadian and British media retain the inhibiting rhythm of human control, the American system seems to run on its own with a kind of seamless logic of the image. Cronenberg's social critique is largely due to an equivalent position as a successful film-maker working outside the Hollywood collective; Cronenberg's films consistently disrupt the smooth language of film semiotics that American cinema has constructed over a century of repetition and sequelization. It is thus with a distinctly Canadian kind of irony that Cronenberg imprisons McLuhan within the simulated 'networks' of the media machine[16], reducing the esteemed theorist to a two-dimensional television character in *Videodrome*. Professor Brian O'Blivion is the apocalyptic incarnation of McLuhan, a self-styled "media prophet" that has evolved to exist only within the lateral depth of the television screen. Bianca O'Blivion, the faithful daughter ("I am my father's screen"), explains that O'Blivion now exists only as a collection of videotapes, a library of prerecorded monologues that foreshadows what Deleuze and Guattari call the "Body without Organs" (Plateaus, 149-66). During a talk-show debate with Max and Nicki Brand (the S&M therapist who enjoys 'brand-ing' herself with lit cigarettes), Professor O'Blivion appears within a television monitor (yet another example of what Bukatman calls 'Terminal Identity'), explaining: "The television is the retina of the mind's eye. That's why I refuse to appear on television except *on* television. Of course O'Blivion is not the name I was born with--It's my television name--soon all of us will have special television names, names designed to cause the cathode ray tube to resonate." The ominous, multiple interpellations of audience in O'Blivion's hypnotic speech are as terrifying as they are effective. As he speaks the camera zooms in close on O'Blivion's head until the screen fills the screen, a diagetic blurring of television, reality, and televisual reality. This is the relationship O'Blivion warns of: the absolute saturation of the TV image that infects the viewer with a new, televisual identity. Bukatman reads this collapse of the hierarchical levels of reality (from the concrete to the simulated image) as the primary achievment of *Videodrome* (91), comparing Cronenberg's refusal to mark the circular descent in and out of hallucination with conventional signifiers to Burroughs' sabotage of the novel (93).

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[16] In *The Transparency of Evil* Baudrillard discusses the secret pathology of postmodern culture: "And we delight... in the viruses that batten on its splendid machinery and send it haywire. In fact, however, the viruses are part and parcel of the hyperlogical consistency of our systems; they follow all the pathways of those systems, and even open up new ones (computer viruses explore possibilities of networks that were never anticipated by those network's designers). Electronic viruses are an expression of the murderous transparency of information on a world scale. AIDS is the product of the murderous transparency of sex... Once 'liberated,' all these processes undergo a kind of superfusion much like nuclear superfusion , which is in fact their prototype" (38-9). The resulting Network (of networks of...) is generalized by the superfusive term Media, a viral meta-system of infinite amplification--if Media runs out of imagined space it can always film/program/write itself new extensions.

From deep within the videated spaces of her father's Cathode Ray Mission, a kind of soup kitchen feeding a derelict hunger for the image, Bianca O'Blivion explains to Max that the simulated privacy of its makeshift stalls helps lost consumers "patch themselves into the world's mixing board." Bianca gives Max a tape from her father's special collection, a tape which triggers a series of hallucinations that the audience experiences through a chilling first-person perspective. From the bulging, breathing plastic of the cassette emerges the interactive image of Professor O'Blivion:

> The battle for the mind of North America will be fought in the video arena, the Videodrome. The television screen is the retina of the mind's eye. Therefore the television screen is part of the physical structure of the brain. Therefore whatever appears on the television screen appears as raw experience to those who watch it. Therefore television is reality and reality is less than television.
> ...I had a brain tumour and I had visions. I believed the visions caused the tumour and not the reverse. I could feel the visions coalesce and become flesh... uncontrollable flesh. But when they removed the tumour it was called Videodrome.

O'Blivion's argument proceeds with the careful structure of a syllogism, a syllogism that is, however, infected with the logic of media, a medium whose sole purpose is to reproduce, reflect, and reshape reality. The argument moves from the general to the specific as O'Blivion's televisual address becomes directly focused on Max with the friendly greeting, "Hi Max." The Western technological logic by which the mutation of the brain causes everything from schizophrenia to hallucinatory realities is reversed in the reflection of the television screen so that the visions, the imagery, is what causes the brain to mutate and evolve. Bianca explains to Max that Professor O'Blivion believed that the videodrome disease wasn't really a tumour, but rather "a new organ, a new outgrowth of the human brain to produce and control hallucinations to change reality." As Max's video tumour responds to the soothing hum of the videodrome signal *his* screen fills up *our* screen, becomes the screen that the audience watches until Max is nothing more than a vague reflection on our terminals. The zoom in on the screen is countered by the zoom in (within Max's television) on Nicki Brand's lips, a dizzying display of how cinematic human vision has become. The lips gradually swallow the space of the screen, swelling out into the room like a self-suckling breast (Testa, 70). Max bends in front of the screen like a video zealot kneeling before his altar; first his hand, then his head disappears into the screen, a melding of cranial flesh and technology, a cancerous embrace that immerses Max fully within the perspective of video hallucination.

Max's encounters with Barry Convex, president of Spectacular Optical ("We make inexpensive eyewear for the third world and missile guidance systems for NATO") are dominated by processes of recording and prerecording. Max watches Convex's prerecorded video greeting which begins (like O'Blivion's message) as an advertisement and concludes as personal correspondence; Convex explains to Max that he wants to use the videodrome prototype headset (which looks eerily like today's virtual reality helmets) to record one of Max's hallucinations for lab analysis. Max has become, as Burroughs puts it, "a programmed tape recorder set to record and play back who programs you who decides what tapes play back in present time" (Ticket, 213); a human tape recorder attached to a tape recorder awaiting the array of tape recorders in the lab, subjectivity becomes digitized in the multiple images of videation.

The videated body moves through the extreme sexualization of violence to the violent re-sexualization of the subject. Earlier in the film Max itches his new womb with his pistol, only to lose it somewhere in the hidden folds of his new genitals. As Convex opens the slit in Max's abdomen, inserting a new program, Max's body completes a mutation from *hyper*heterosexual male to *hyper*transsexuality, a sexuality that is purely of the image, a simulation eroticism that opens sex up to viral proliferation; Bukatman (325) draws attention to *Naked Lunch*: "The physical changes were slow at first, then jumped forward in black klunks, falling through his slack tissue, washing away the human lines... In his place of total darkness mouth and eyes are one organ that leaps forward to snap with transparent teeth... sex organs sprout anywhere" (Lunch, 9). Whether figured as reproductive organs (the metaphor of virus) or as liberated organs of infinite pleasure (viral replication), the videobody of Max is breaking out with a very literal venereal disease--his cathode-radiated flesh breaking out in cancerous cunts and tumorous cocks.

The Flesh Gun, a phallic weapon that drips a sticky white pus, transfers the symbolic to the concrete, becoming the videosexual extension of Max's arm: coiled screws sprout as video arteries twisting their way through the skin and bone of his forearm; permanent track marks signifying his addiction to the videodrome program[17]. This 'hand gun' later becomes malignant, all oozing sores and dying cells, as Max chases Bianca around the Mission. Coming face to face with his video reflection, Max sees a fleshy screen, a surface whose skin is stretched by the shape of the gun that mutates the screen from two dimensions to three. Max fires, the screen fires, the screen becomes Max's chest, blood trickling from the wound. Bianca O'Blivion, stopping the tape, turns to Max, "It's hard to remove the flesh, change the program. You have become the video

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[17] The physical embodiment of Max's desire to "change the program," the grafted gun resonates with the frequency of a remote control. The remote control adds a convenience of agency to the media age and yet this agency is redistributed along traditional power lines: Mark C. Taylor and Esa Saarinen write, "The one who controls the remote control holds the power. If the remote control governs access to the [new] symbolic order, then it is not surprising that it is controlled by the father... The remote control is, in effect, the materialization of **le nom du pere**" (Video Vision, 5). Videodrome redistributes that power in a hermaphroditic body that is beyond the politics of sexed flesh, a symbolic transfer that turns against patriarchal methods of control.

world made flesh." Max has been retuned; no longer an agent of Videodrome, Max is now an embodiment of the New Flesh, the signifier of a new organic technology; the video *word* made flesh.

The New Flesh is the cinematic version of Burroughs' Nova Inspector; a counter-viral double agent that works *within* the system it destroys. When Max returns to Spectacular Optical for reprogramming Harlan fails to follow established safety protocol, thrusting his bare hand into Max's belly with a sneer. Max clenches his new abdominal muscles, his new video translation organs, mutating Harlan's hand into a diseased and malignant baton grenade which explodes in a cloud of skin and blood. Max has become an organic video machine and, as emerging information viruses have proven, machines are far from immune to mutating disease. Harlan forgets to wear a glove while probing Max's private parts and, consequently, becomes terminally infected. Moving on to the Spectacular Optical Convention--a multi-media spectacle in honour of the Florentine Lorenzo Medici ("the eyes are the window to the soul")--Max sprays Convex with his flesh gun, shooting up a video cancer into his flesh. Malignant cells erupt from his nose, skull, abdomen, like a nasty venereal brain tumour; the imagery that Convex struggles to repress and control consumes his body in the form of disease.

Max wanders to an abandoned and rusted boat, its walls echoing the colors and textures of the Videodrome set, its floors littered with a collection of cinematic rubbish (bottles, wrappers, cigarettes that appear as props throughout the film). Finding himself before a large screen television, Max hears Nicki explain, "You're body has already done a lot of changing but that's only the beginning, the beginning of the New Flesh. You have to go all the way now, total transformation;" the New Flesh is what beckons beyond the virulence of Videodrome. As the television explodes in tumors, Max sees his own suicide played out on the screen, a video dictation of the events which have been scripted beyond his control, events that have become part of the program. As Max holds the gun to his head he announces, as the television has announced only a moment ago, "Death to Videodrome. Long live the New Flesh." The gun goes off to the image of the blank screen, a terminal feedback loop in a video signal that resonates an evolution. The New Flesh is the slogan of revolution, the catch phrase of a technological evolution that, through the blending of man and machine, produces a physical media space, an actualized video reality. Bart Testa reads Nicki's command as an offer of

> extermination/resurrection, soliciting him to the no-place of origin, Videodrome itself, where the difference between TV signal and the flesh collapses into the 'communicational.' This is the seductive call that is, for Baudrillard, always the call to return to origins that never were--here back to the source (the TV itself) that made Max what he has become.
>
> (Testa, 70)

Cronenberg ends the film with a reminder that the spectacle is always prerecorded, that the outcome has been scripted, filmed, and edited in conspiracy laboratories awaiting the predetermined broadcast date. And yet the ending is no ending at all: as Max submits to his media cancer in order to transcend it he reinscribes his self in the empty flesh of a terminal identity loop.

Cronenberg's post-VD work continues to examine the connections between technology, science, sexuality, narcotics, and creative production, connections that find their roots in a reading of Burroughs. In *The Fly* (1986), a remake of Kurt Neumann's

1958 film, Seth Brundle (the first scientist-as-protagonist, rather than science-as-antagonist, in Cronenberg's filmography) is developing a 'telepod' technology that can decode and reinscribe the body through time and space: "human teleportation, molecular dissemination, breakdown, a reformation!" After an experimental teleportation of steak--lover Ronnie complains that it tastes synthetic--Brundle realizes "The computer is giving us its interpretation of a steak, it's translating for us. It's rethinking it, rather than reproducing it, and something is getting lost in the translation." Brundle wants to infect the computer with desire, to "[teach] the computer to be made crazy by the flesh, the poetry of steak." As Seth and Ronnie copulate in front of the telepods Seth roles over, impaling a small microprocessor in his back. Ronnie removes the chunk of silicon and circuitry, revealing the wound that will make Brundle vulnerable to teleportational synthesis with the fly. This is the actual moment of infection, the mixing of blood with binary commands, a contamination by the technology which (sexually) represses him. Injected with a hypermasculine vigor, Brundle cruises the city like a speed freak in search of sexual conquest. He attacks Ronnie for her inability to keep up to him:

> You're afraid to dive into the plasma pool, aren't you? You're afraid to be destroyed and recreated, aren't you? I bet you think you woke me up about the flesh, don't you? But you only know society's straight line about the flesh! You can't penetrate beyond society's sick, grave fear of the flesh! Drink deep or taste not of the plasma spring, see what I'm saying? I'm not just talking about sex, and penetration, I'm talking about penetration beyond the veil of the flesh!

Like Max Renn, Brundle wants to "break through" into a new form, a techno-sexual mutation[18] that translates the body into an insectual machine. Brundle stares at his cancerous, amputated organs, a collection of appendages in preserving jars that includes his shriveled penis: "Relics... vestigial, archeological, redundant, artifacts of a by-gone era, of historical interest only." Brundle is cataloguing the historical body made redundant in the age of cyberbodies, the age of The New Flesh. Contemplating his metamorphosis into Brundle/Fly, Seth says, "It's showing itself as a bizzarre form of cancer. A general cellular cancer, a revolution," and "I seem to be stricken by a disease with a purpose, not such a bad disease after all," recalling Burroughs' conception of "a *nice* virus."

Brundle-Fly's contamination, while not contagious, cannot be contained within his changing body. Ronnie's pregnancy, her "conception" of his disease, threatens to reproduce Brundle-Fly within the laboratory-like sanctity of the womb. Pregnancy is once again, as in *The Brood*, treated as infection, a viral reproduction of a contaminated organism. In Ronnie's abortion dream she rushes to the hospital with (ex-boyfriend and publisher) Stathis and is strapped to a table as the abortion doctor, played with gleeful abandon by Cronenberg himself, pulls a twitching mass of larvae out of her body. The phallic maggot twists and turns between surgical tongs, bringing Ronnie out of her dream with a scream. With the diseased imagery of Burroughs' Insect People of Minraud (*Nova*

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[18] The mutation of sexual and gender identities occurs throughout Cronenberg's body of work, perhaps a result of the juxtaposition of Burroughs's homosexual horror with Cronenberg's clinically-traumatized heterosexuality. This juxtaposition is metaphorized in Dead Ringers (1988) through the twisted psycho-sexuality of the Mantle twins, gynecological predators with their own self-contained systems of sex and gender. Sex, medical technology, and drugs form a symbolic trinity in the film; like a Burroughsian junky Beverly continually pops butazmine to fight off withdrawl from the symbiotic schizo-sexuality he shares with Elliot. In Beverly's dream, he and brother Elliot are joined at the abdomen by a fleshy version ot their revolutionary device, the Mantle Retractor. As a woman chews her way through a thin membrane protecting joints of bone, blood, and surgical steel to release Beverly from their traumatic union, the shock of umbilical severance sends Beverly screaming from his siamese dream. This seems to me a particularly sharp metaphor for the almost "umbilical" or parasitic relationship that exists between Burrough's pen and Cronenberg's camera.

Express). The technological, viral reproduction of insectual machine flesh infects the maternal body as a site of mutated genetic replication.

Naked Lunch, Cronenberg's *visualization* of Burroughs' landmark novel, mutates many of the novel's literary themes into cinematic concerns: the close attention that Burroughs pays to the intracacies of language, to the manipulation of the signifier, *to getting language high*, is translated into special effects, surreal and *hyper*real sets, and expressionist lighting. Burroughs' technological conspiracy theory deals primarily with the relationship between the societal by-product junk (*specifically* heroin, *generally* economies of power and control) and the act of literary creation. In Cronenberg's film, however, technology moves to the forefront; the relationship between narcotics and creativity is now directly mediated by science-fictional devices, technologies that are themselves the withdrawl symptoms of the junk (both literary and chemical) that created them. Extending Burroughs' formulation of the alien as insect, Cronenberg breeds insect and machine, forcing the audience to inhale the noxious fumes of their erotic coupling. As Joan explains to (Inspector) Bill Lee, injecting bug powder is "a very literary high. It's a Kafka high, you feel like a bug." When Bill walks in on Joan fucking the Kerouac character (Hank) on the sofa and inquires as to their success Joan responds, "Hank can't come, he's on junk. I'm on bug powder, I don't *need* to come." The associations between insect, imagination, sexuality, and addiction provide a taste of the cinematic trip that is *Naked Lunch*.

Fleeing from the death of his wife, Bill Lee purchases a ticket to Interzone, a cosmopolitan slum that fluctuates between New York City and Tangiers. Of course

Interzone isn't an actual place, but, as its name suggests, is somehow *between* spatial realities, a testament to the awesome power of consciousness-raising drugs to open up imaginary spaces and to inject those spaces with the functional illusion of reality. Entering an Interzone coffee shop, Bill is addressed by a hunch-backed Mugwump-- an alien, lizard-like muse who secretes an addictive, pro-creative fluid from the erect tentacles on his head. Part semen, part pituitary juice, this "literary" junk keeps the hordes of writers huddled around the cafe full of creative energy. The Mugwump turns to Bill and croaks, "I suggest a Clark-Nova Portable. It has a mythic resonance." Clark Nova, a writing machine that sounds like the name of a primitive sci-fi hero (not to mention the resonances with Burrough's sci-fi novel *Nova Express*), forces the question of how a machine--something constructed from plastic and metal--can possibly have "mythic resonance." The answer lies in the fact, almost always over-looked by the literary elite, that the entire canon of western mythology has been updated and replaced by a post-modern system of mythology, a *technological mythology* where archetypal patterns evolve through the generational consciousness faster than Mercury can deliver the news. Burroughs has stated on numerous occasions that his purpose in writing is to produce a mythology for the Space Age. Cronenberg translates Burroughs into a mythology for the Information Age, a symbolic collapse to the inner space of technological landscapes. The Media Age produces its own symbology, its own systems of reference--the instruments of technological evolution, from the television screens of *Videodrome* to the stainless-steel surgical tools of *Dead Ringers*, all resonate with the *mythic* vibrations of a technological consciousness. That Cronenberg invests Burroughs' machine of choice, the manual typewriter, with "mythic resonances" can only be read as a cross-generational show of respect. The cafe itself is littered with writers hunched over their word machines--a virtual factory of junk-induced textual production.

The very next scene takes place in a Black Meat Factory, a sweat-shop of narcotic production that resembles the bug-powder air of the extermination company headquarters. Haggard-looking workers push the giant aquatic Brazillian centipedes through meat grinders and sift their pulpy flesh in pans, leaving the hallucinogenic meat to dry in the sun. The parallel between the literary cafe and the narcotic factory is expressed skillfully as entranced workers, bound to their appliances, grind out their product through small, hand-operated machinery. Indeed, during the final scenes of the film, the mugwump jism factory is crowded with the hungry writers of the cafe who welcome sexual degradation as the price for the seductive stimulation of language and imagination.

The narcotic obsession with creative production, technological inspiration, and chemical invention creates a kind of spatially-compacted *triptych*, a complex layering of theme and imagery that transforms even simple conversation into a psychedelic ordeal--*a linguistic trip*. Tom Frost confesses to Bill, "I've been killing my own wife, slowly, over a period of years. Well, not intentionally--on the level of conscious intention its insane, monstrous." Lee, still clinging to the last shred of rationality, replies, "But you do *consciously* know it. You just said it... we're *discussing* it." Tom, giving Lee a curious look, explains, "Not consciously. This is all happening telepathically. *Non-consciously.* If you look carefully at my lips you'll realize that I'm actually saying something else. I'm not actually telling you about the several ways I'm gradually murdering Joan, about the housekeeper, Fadela, whom I've hired to make Joan deathly ill by witchcraft, about the medicines, drugs I've given her..." The soundtrack is indeed out of synch with the character's lips, transferring Lee's time-warped confusion directly onto the audience, playing a subtextual message that broadcasts just under the surface of everyday consciousness. Hunched over his typewriter in a cold sweat, composing a "report" for Hank, Lee writes, "I seem to be addicted to something that doesn't really exist," recalling Burroughs' "addicts of drugs not yet synthesized" (Lunch, 49). With reference and respect to Burrough's "cut-up" method of word-play and association, the *cause* of Lee's addiction is swallowed up by its *effect*--the addictive imagination of the writer *rewrites* his own addiction; by *add*ing junk to *diction* the writer writes *addiction*[19] and is then left staring blankly at the page, at a loss to explain the words that confront him.

The metaphor (and the resulting metamorphosis) of writing, of typing, of translating the imagination into language, serves as Cronenberg's authorial interpretation of not only *Naked Lunch* itself, but of the relationship between Burroughs and his work. As Bill Lee sits at his typewriter the machine begins to type on its own, begins to talk, and when Bill next looks, it has transformed itself into a fleshy insect machine, its magnificent wings spread in textual ecstacy. The writer Tom Frost then warns Lee, "I wouldn't use a Clark Nova myself--too demanding. If I get blocked again I'll let you try my Martinelli. Her inventiveness will surprise you." In *The Fly*, Seth speaks of 'insect politics': "Insects don't have politics, they're very brutal, no compassion, no compromise, we can't trust the insect... I want to be the first insect politician." The brutal politics of the insectile imagination in *Naked Lunch* provide more than mere conspiracy mood music; the writing machines are invested with an intense, competitive hatred for each other, a professional jealousy that extends to the level of the writer himself. When the masculine-gendered Clark Nova sees the feminine-gendered Martinelli it immediately attacks, the keys becoming jaws, the ribbon a tendon flexed for violence. Clark Nova chastises Lee, "My God Lee, surely you know better than to bring an agent into your own home! You gave me no choice. You were giving her access to your innermost vulnerabilities, *forcing* them on her for god's sake." This gendering of technological bodies comments on the homosexual misogyny that pervades Burroughs' writing, as well as revealing the occasionally problematic representation of women within Cronenberg's films which has led critics like Robin Wood to attack Cronenberg as body-phobic. More interesting then the human gender issue though is the way insect sexuality and techno-Darwinism come together in a bloody clash of metal. How many of our everyday appliances have been gendered? Are appliances gendered by the sex of their user, or by the shape of their bodies? (A curling iron seems to be gendered feminine and yet its shape, its function as a red-hot, phallic instrument seems to suggest masculinity) Could it be that technology is developing along a sex/gender matrix quite independent of our conscious designs? With polarized sexes comes a magnetic attraction, a fascination with difference that reproduces the species. Can technology reproduce itself as the synthesis of two competing appliances? Doesn't it already? What are the implications of Burrough's homosexual, technological consciousness in relation to Virus, which tends to proliferate along lines of absolute sameness?

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[19] This play of 'ad diction' has been recontextualized from a chapter of the same name in Mark C. Taylor and Esa Saarinen's *Imagologies: Media Philosophy*, a text I will return to at a later point.

Joan Frost admits, "I'm not good with machines, they intimidate me" to which Bill Lee responds, "I understood writing could be dangerous. I didn't realize the danger came from the machinery." With this warning Joan begins to type on Tom's arabic machine, responding to Bill's requests to write something hot, something dirty. As Joan massages the keys, the typewriter gradually opens up, revealing inner folds of nerves and veins, a giant erection swelling from the rear end of the machine. Finally the machine is transformed into something that looks like both a centipede, a mollusk, and a human being-- a man/machine/insect hybrid that drops on top of the passionate couple and begins to hump madly. When Lee throws it out the window and it crashes on the pavement below, the viscous flesh alchemically reverts to metal and plastic, leaving a corpse of broken machinery on the sidewalk. It is the power of language, the erotic prose of Joan's imagination (not to mention the hash resin) which transformed the machine into a sex-crazed lobster-like thing: perhaps technology isn't as dangerous in itself as it is through our perceptions, through the ways we manipulate and abuse it.

The scraps of dead metal that are the broken remains of the Martinelli are placed inside a pillowcase which Bill drags around with him in mourning. When Hank and Martin find Bill sleeping in a ditch, his head resting on the uncomfortable pillow, they look inside--the sack is filled with an impressive assortment of pills, powders, and paraphernalia. Bill calmly explains, "These are the remains of my last writing machine. It's been a big problem for me." The typewriter, the technological manifestation of an evolving creative mind, has become the scattered scrap machinery of junk, a seductively circular relationship of production and consumption. It is Kiki, the young Interzone hustler, who comes up with a solution for Bill's bag of junk. Kiki takes Bill to a blacksmith/alchemist who *reforges* the writing machine. The new Martinelli is a severed Mugwump head, the keys laid out like dulled teeth in the machine's open mouth. As Bill types, the anemonae-like antennae protruding from the machine's head secrete a milky, sticky, intoxicating liquid that drips down onto the typist's hands. As repayment for his services Lee takes Kiki to visit the "swiss dandy" Yves Cloquet who, transforming himself into a giant centipede, sodomizes Kiki, his sharpened legs piercing the boy's cheeks, holding him hostage to an insect lust.

Lee, searching for his beloved Joan, played dryly by Judy Davis (who also plays the role of Bill's wife in the early scenes of the film), uncovers Dr. Benway's Mugwump jism factory, the latest innovation in the creative narcotic economy. Mugwumps hang upside down from chains in the ceiling, their mouths muzzled with leather harnesses as greedy workers suck their horns. Somewhere between an S&M convention and a commercial dairy farm, the factory serves as the space in which all the threads of the film weave together. Benway turns to Bill Lee and says, "Speaking of new uses for old technology, I think the new order could find a place for a man of your calibre. A .32, wasn't it?" Writing, violence, technology, recycling of language, invention, the new flesh--these multi-layered and interdependent themes come together in the personal symbology of Burrough's imagination; everything becomes clear in that moment between the pull of the trigger and the realization that he has killed his wife, the moment in which

Burroughs has declared that it became clear to him that he was to be a writer (Miles, 53). The post-script to the film in which Bill and Joan travel to Annexia only to be stopped at the border is only the playing out of what the all-powerful Dr. Benway has determined as the final act. Claiming they need verification of his identity as a writer, the border guards smile knowingly as Bill Lee turns to the sleeping Joan, raises his gun, and re-creates the infamous William Tell act. It is a scene that reverberates throughout Burroughs writing, and, working off the endings of *Videodrome*, *The Fly*, and *Dead Ringers,* it is a scene that reverberates throughout *Naked Lunch* in a feedback loop of the imagination, a never-ending reality trip that no drug can cut through, that no writer can re-write.

Fractal Media
or, How the West Was Undone

The mediascape is a self-inventing neologism: from the fractured networks of signs that proliferate to every corner of the globe without regard for boundaries of space/time emerges a macro-Media that defines a spectral whole from its disjointed parts. As the evolutionary ancestor to the newly emerging cyberspace, mediaspace is the dominant economy of image and word, an economy established through intertextual layers of television, magazine, radio, and newspaper cultures. In the post-McLuhan era we often study media--more often, however, media studies us: scanning our cultural surfaces; measuring public reaction to media events; testing the limits of cable marketing and sub*script*ion consumerism. In the past 'the media' has been theorized as an electronic parasite riding the back of high culture, translating an elite aesthetics for mass consumption--In postmodern culture, however, media threatens to reverse the parasitic chain, to assert a fully functional and autonomous form *as host* to culture's parasitic thirst for Image. It is only in the age of advanced media that memetics, complex systems math, and the applications of fractal geometry and chaos theory have invaded the fragile boundaries of the humanities, transforming the purely textual into the *technotextual*: If the medium is the message and the message is media, then the medium is Virus, the techno-pathology of our postmodern circuitry.

Thomas A. Gentry, in "Fractal Geometry and Human Understanding" writes, "the emergence of fractal geometry can be viewed as more than techniques to create (or compress) exotic patterns and naturalistic images; it represents a new way to think about everything, including 'thinking' itself" (Abrahams, 147). Fractal geometry and complex systems theory represent the absolutely self-referential, infinitely reductive nature of code (genetic and literary). In fractal landscapes--found everywhere from submerged icebergs to desert sand dunes--space and time eternally collapse and implode upon themselves, dazzling the linguistic center of the brain with the hypnotic, kaleidoscopic effects of the Mandlebrot Set. Such imagery has been commercialized through ad campaigns, calendars, computer animation, etc. reflecting the fantastic order of chaotic algorhythms back onto the reflexive surface of a terminal culture. No matter how closely one zooms in on the images of the Mandlebrot Set, new patterns emerge from microscopic compression; paradoxically, the further one focuses into the image, the richer and more complex the detail--*an inverted visual logic that charts the movement to inner space*. Fractal becomes the spatial metaphor of Virus, a relationship of digital contiguity that expands meaning by collapsing the illusion of space.

Although media is moving away from print culture towards the symbolic economy of the image, its roots are to be found in printed language, a rhizomatic word culture. Just as genetic material contains the code for its own mutation (evolution) so linguistic media carries the seeds of its own translation into pure image, a return to the pictographic technology of more advanced civilizations such as the Egyptians or Mayans[20]. McLuhan charts the moment of this evolution as an extreme acceleration of nature:

> When we put satellites around the planet, Darwinian Nature ended. The earth became an art form subject to the same programming as media networks and their environments. The entire evolutionary process shifted, at the moment of Sputnik, from biology to technology. Evolution became not an involuntary response of organisms to new conditions but a part of the consensus of human consciousness.
>
> (Blast, 143)

Or, one might say, Evolution became the *media*ted engineering of future conditions. As media networks use satellite technology to escape Darwinian Nature they create neo-Darwinian systems of control, networks that expand and collapse according to a Darwinian/Capitalist logic of survival, *an electronic translation of nature from mass to energy*. Baudrillard complements McLuhan: "From the moment the first astronauts began circling Earth, we each began secretly circling round ourselves. The orbital era is here. Space is a part of it, but its expression *par excellence* is television, as well as a good few other things, among them the rondo of the molecular spirals of DNA" (Evil, 29) This translation from periphery to a primitve centre enacts an explosion of information with a corresponding implosion of meaning; signification becomes so prolific that nothing comes to signify any*thing* any*more*. In order to understand this evolutionary leap into the electronic media universe, McLuhan looks back to print culture to read the headlines of its demise. In *Laws of Media: The New Science*, McLuhan and son experiment typographically:

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[20] Burroughs, having studied Mayan and Aztec culture at Mexico City College and Harvard, became obsessed with the control calendars of the Mayan priests--pictographic codes that regulate time within Image. Beginning on December 23, 1969, Burroughs removed himself from the Western calendar, submitting to his own "Dream Calendar." Months, consisting of 23 days (Burroughs' Virus B-23, Crowley's psychic number), took on names like Bellevue and Wiener Wald, and Burroughs faithfully dated all correspondence and texts according to the new system (Miles, 175). Burroughs' Dream Calendar is an experiment in media consciousness, a sustained study of how the subject is regulated by pictoral codes, of which television and magazine culture are only the most recognizable.

> Tetrads: Xerox
>
> just as the fast
> Gutenberg press enlarged
> the reading public,
> now the speed of printing
> becomes the speed of light...
> (145)

Print culture, initiated by Gutenberg's 'invention' (although it was actually invented much earlier by the Chinese), was the birth of a logic of replication, of copy, which directly initiated the Industrial Revolution, the logic of the factory. Xerox technology is Gutenberg *on speed*, the pure speed of culture moving with the velocity of light. McLuhan points out that language has always been a control function of society and that the electrification of language is merely an electrification of control: "Not until the photograph movie and TV did there appear any rival to the insatiable cultural conquest of the phonetic alphabet" (Blast, 80). In *Understanding Media*, McLuhan elaborates on linguistic colonization: "That is the reason why our Western industrial programs have quite involuntarily been so militant, and our military programs have been so industrial. Both are shaped by the alphabet in their technique of transformation and control by making all situations uniform and continuous" (Understanding, 85). The figure of communication which enables this uniformity, for McLuhan, is metaphor, which he breaks down into the greek *meta / pherein*, to carry across or transport (89). Language provides new medias with a foundational grammar of expansion, a desire to replicate, infiltrate, and mediate consciousness with metaphorical code. Baudrillard, in an interview with Nicholas Zurbrugg, offers his trademark apocalyptic ambiguity to the subject: "Language has to be synchronous with the fragmentary nature of reality. With its viral, fractal quality" (Gane, 171), exposing the code of metaphor as the fractal encryption of meaning within the communicable reality of Virus. De Kerckhove, the Director of the McLuhan Program, sees *rationality itself* as part of the "alphabetic psychodynamic" (33) which writes (or at least reads) "the most powerful codes of mankind: the atomic structure, the genetic string of amino acids, the computer bit" (34). Genetic language attempts to map the unfolding of code into distinct organism onto a textual field in which a chemical vocabulary produces a 'prerecorded' prose; Binary language reflects the Western dualistic logic inscribed within the English language, what Burroughs calls the pain/pleasure switch, "I love you/I hate you--at rapid intervals" (Cities, 224).

Mark C. Taylor and Esa Saarinen's *Imagologies: Media Philosophy* is the end product of a course in media theory taught jointly (by satellite uplink) in Finland and America. As a collection of emails, seminar transcripts, and typographical word plays *Imagologies* is a printout copy of an anti-print philosophy, a hypertextual document that attempts to track the digitization of language: "imagology insists that the word is never simply a word but is always also an image. The audio-visual trace of the word involves an inescapable materiality that can be thought only if it is figured. The abiding question for conceptual reflection is: How to (dis)figure the wor(l)d?" (Styles, 3). Taylor and Saarinen celebrate the liberation from horizontal association blocks in the intertextual depth of hyperculture, or *simcult*: "Hypertextual writing creates a semiotic blur of crossreferencing. Every word is, in principle, a hot word that is linked to endless chains of reference, which, in turn, are linked to other referential traces. Furthermore, these networks are not fixed or stable but are constantly changing and shifting. The text is no more secure than the author is authoritative" (Telewriting, 8). The act of reading collapses into a metonymic, hypertextual surfing (pardon the cliché) through language, a movement that rejects the left to right, top to bottom logic of the printed page. De Kerckhove reads the hypertextual sign as a restoration of autonomy to a subjectivity of reflex consumerism--the transformation of one-way televangelism to a two-way, interactive relationship that interfaces biological organisms and electric language (125). Hypertextual language reveals "the infinity of the signifier" (Telewriting, 9) that reflects the interactive sexuality of advertising: "In simcult, ad diction is crafted to create addiction. Image produces desires that are necessary to keep the economy running. In the electronomy, all investments are libidinal" (Ad-Diction, 1). Language becomes sexualized on the screen through the multi-dimensional illusion of hypertext; if you are attracted to a word you just reach out and touch it--instantly you find yourself within a new environment, surrounded by other stimulating words of your *type*; the very process of reading becomes an erotic act of creation by which you choose which words signify and banish the others to an empty screen. Taylor and Saarinen write, "Regimentation by advertising becomes more extensive as the electronic means of reproduction become more subtle. The most effective ad is the one that is not recognized as such" (Ad-Diction, 1). Subliminal advertising[21], like the videovirus of Cronenberg's *Videodrome*, can even be delivered under a test pattern; image is merely the sheep's clothing that catches your eye as you window shop your screen (see what I'm saying? I just made you want to buy a new winter coat). Hypertext mutates the metonymy of ad culture by re-highlighting the **word**; as *Imagologies* declares, "Paradoxically, the dematerialization of the text on the video screen creates the possibility for the reemergence of the materiality of writing" (Telewriting, 8).

Postmodernism marks a reversal in the encryption/decryption of the world in much the same way that retroviruses mark a reversal in the fundamental logic of biology, a logic in which information always flows from DNA to RNA (Mosekilde, 18). The retroviral enzyme "reverse transcriptase" switches the polarity of communication, enabling viral RNA to 're-write' DNA (as in the case of AIDS), infecting cellular politics with an anarchic logic of immuno-revolution. Baudrillard takes up this issue in an interview with *Le Journal des Psychologues*:

> This is the whole problem of reversibility, that is to say, knowing whether all these processes which are in the logic of the system can have a reversible effect. Virulence, for example, could well come to have a destructive effect on the system: the system becomes vulnerable to its own logic... it is no longer we, the subjects, who are leading a revolution against the system, by facing up to it, but a catastrophic principle, not in the apocalyptic but in the logical sense of the term, catastrophe as form. This reversible form means that... [systems] are self-referential and self-

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[21] Ballard's short story "The Subliminal Man," depicts an economy of standardization in which consumers work a mandatory thirteen hour work day in order to serve a production industry accelerating beyond control. As workers drive their identical new cars home along twelve lane expressways with 10 mph speed limits, they are forced to contemplate hundred foot high signs "fitted with heavy concrete grilles similar to radar bowls" (Stories, 176) that broadcast subliminal commands: "BUYNOWBUYNOWBUYNOW..." (187). The frightening thing about contemporary advertising culture is the transparency of this message, a liminal rather than subliminal command to contribute to cycles of overproduction and hyperconsumption.

> destructive. You could see AIDS as a sort of acceleration, as a way of thwarting this latent global logic of the systems by a more rapid catastrophe, in a certain fashion, the appearance of *antibodies*.
> (Gane, 175, emphasis mine)

This reversal penetrates all systems, including media. The electrification of image results in a corresponding mutation of bodies into *anti*bodies, a mediation of the flesh which attempts to denaturalize the body and rematerialize it as the reflection of a mediabody. McLuhan writes:

> In the electronic age, as the media begin to dwarf nature, nature imitates art more and more. Oscar Wilde records his amazement at finding London drawing-rooms overflowing with long-necked, pale, auburn-haired women where, before the paintings of Rosetti and Burne-Jones, such women had never been seen. Today that is normal. Every movie and every issue of Vogue breezily sets out to revamp not only our clothes but our physiology. Such is the amount of power available today that the boundaries between art and nature have disappeared. Art has substituted for Nature, and various new political regimes naturally tend to act on these assumptions.
> (Blast, 134)

Or, as folksinger/activist Ani Difranco writes, “Art may imitate life, but life imitates TV.” From the mousy housewives of the fifties and sixties, women’s magazines (of the genre of Vogue, Elle, Cosmopolitan, etc.) have evolved their imagery to reflect the proliferation of multiple fashion identities that cloak mutable physiologies, radiating normative gender identity into a proliferation of schizophrenic identities that can be exchanged according to seasonal trends. Transvestitism is an ancient tradition but only recently has it come out of the closet and onto the screen: popular drag queen movies starring action-adventure hunks like Patrick Swayze and Wesley Snipes compete for attention with RuPaul and Dame Edna, transvestites with their own cable talk shows. Calvin Klein ads fluctuate between androgynous sexuality and hyperheterosexuality according to the most recent demographics (ie. who wore what to the Oscars), each fluctuation translating into a corresponding mutation in a corporate corporeality. The aestheticization of bodies in the media age is but one example of the virulent reversal that has warped the mirror between art/nature, science/language, male/female, and other artificial control binaries.

The overlapping of language and science is of key concern to the analysis of Virus. If language is a virus and AIDS is a virus then the way we talk about disease is a function of the viral nature of a scientific language rooted in metaphor. Anne Eisenberg, in an editorial "Metaphor in the Language of Science," charts the dangers of metaphorical explication from Hobbes and Locke through Darwin, claiming that the use of metaphor within science is proliferating in proportion to the expansion of technology. Predicting that metaphor will conquer the science of language (and the language of science) because it is *the* trope of understanding (144), Eisenberg demonstrates that metaphor mediates the otherwise untranslatable distance between scientific technology and human understanding. The consequences of such a perspective are frightening; mediated in metaphor, technology is evolving analogically--a simulation of a metaphor which is itself a simulation (what Baudrillard refers to as fourth level, or viral simulacre).

In an interview with the Korean publication *Literature and Thought*, Noam Chomsky suggests, "I think that we should study the problem of language and mind very much the way we study any problem in biology... [Linguistics should] attempt to discover the structural principles that determine how the system functions... how the system develops in the organism from the initial genetic codes to its mature state, and the physical mechanisms that enter into the system and how they interact with other systems"

(Chomsky, 253). In a seperate interview Chomsky goes on to compare the study of language to molecular biology in terms of genetic growth: “In fact, language development really ought to be called language growth, because the language organ grows like any other body organ” (407). For Burroughs (and Cronenberg) this language ‘organ’ is essentially a brain tumor, a cancerous growth that conceals a CIA implant which prerecords the thoughts and actions of ‘free’ individuals, a conspiracy that is mirrored by combining Chomsky’s media paranoia with his notion of an innate language faculty.

Chaos has emerged as a serious perspective in the academic field of Psychology only in recent years and yet it is proliferating throughout established discourse. Ben Goertzel’s fascinating argument in “Evolutionary Dynamics in Minds and Immune Systems,” begins with a simple equation: “Both the mind/brain and the immune system are complex, evolving, self-organizing systems. Therefore, according to complex systems science, one should expect there to be significant points of commonality between mental function and immune function” (169). Complex systems science, translated into the terminology of literary criticism, is *like* a deconstructionist structuralism--a post-deconstructionist conversation between structuralism and its transcendence in order to express the absolute complexity of the excluded middle--a liminal criticism of simulacrum (again--Baudrillard’s use of the word ‘fractal’ to express this convergence of simplicity and complexity). Our minds *are* our bodies--and yet the schizophrenic metaphor divides into duality, doubles the vision irreperably. With a Chomskian tone Goertzel declares that both learning to walk and learning to recognize an antigen involve a “simple evolutionary mutation algorithm” (169). Following a complex mathematical argument (which I cannot pretend to understand, let alone translate) and aided by the analogy of a computer program (or image) reduced to code (or fractal), Goertzel defines Intelligence as "able pattern formation and recognition," and Mind as "the structure of an intelligent system" (171). By juxtaposing these carefully constructed definitions Goertzel derives the claim, "prediction and pattern-recognition [inductive and deductive reason] are necessarily based on analogical reasoning," and that "Analogy requires continual search for related patterns" (171). Aided by a technological metaphor, Goertzel claims that all reasoning is metaphorical by nature; that complex systems operate metaphorically*; that all knowledge is essentially knowledge about something else*.

Goertzel continues his argument by following metaphor *into* the body in a discussion of analogical patterning in Immunodynamics: "Chaotic dynamics accentuates the Darwinian process of mutation, reproduction, and selection in the sense that it causes certain antibody types to pseudo-randomly reproduce far more than would be necessary to deal with external antigenic stimulation. Then these excessively proliferating antibody types may mutate and possibly connect with other antibody types, forming new chains" (173). To decontextualize this claim (with respect to the equation of mind/brain with immune system in terms of "pattern-recognition") let us substitute 'signifier' for 'antibody.' The mind, stimulated by foreign ideas (antigens, or, more generally, 'memes'), produces an excessive proliferation of words (antibodies) in order to grasp and contain the invader. Where does the excess language go? (this question, unlike my project, is not a rhetorical one) It spills out in speech, in writing, in every form of artistic expression--*in communication* (in metaphor). Language, through a consideration of chaotic dynamics, Darwinian mutation, and the pseudo-genetic science of memetics, is revealed as a system of mutating signification. Echoing the body's production of "new chains" of immuno-compounds, memetic infection produces new chains of signifiers.

The role of metaphor within complex dynamics psychology is explored in Frederick D. Abraham's "A Postscript on Language, Modelling, and Metaphor." Abraham writes, "in addition to providing a metamodelling strategy, dynamics [complex systems theory] also provides a perspective, a *metaphorical approach*, to professional applications" (312). Making this metaphor concrete, Abraham declares, "Trying to standardize language is impossible, and to do so, is like playing the chaos cop or the fractal fascist" (313). Chaos theory represents a structural analogy that can transcend (analogically) interdisciplinary barriers on the way to multi-dimensional or quantum understanding, and yet the metaphors that Abraham employs are the power/control strategies used by police states and political extremists. Abraham, through a complex and paradoxical metaphor, reveals the nuclear potential of complex systems as a theoretical tool that constantly threatens to self-destruct--it seems evident (by definition) that chaos theory contains the viral code that could easily mutate to consume *theory itself*. Abraham identifies the fractal process of reverberation that can echo up through a complex dimensional chain: "Indeterminacies at the quantum level, by dint of sensitivity to initial conditions and influence via hierarchical networking through parallel and serial paths on control parameters, can get amplified to indeterminacies at psychological and social levels" (333)--in less convuluted terms, the most simple 'causes' can produce the most complex 'effects.' Invoking Abraham's own formulation of 'metaphor' as the figurative similarity between distinct disciplines, this quantum-to-social amplification carries the same chaotic threat as an Ebola cell packed full of virus particles to the point of extreme amplification, or the (metaphorically) identical potential energy of a nuclear warhead. The pressure that chaos theory exerts on the skin of culture--on the stretched threshold of perceived reality--constantly threatens to burst forth and contaminate. At this relatively infantile state in the evolution of complexity theory and quantum math the spread of infectious and antiorthodox ideas is contained within the 'theoretical,' but, like the proliferation of antibiotic-resistant bacteria that is gaining velocity at an exponential rate, the 'prerecorded' message of memetic invasion is clear: The period of dormancy is ending--the age of Virus has begun.

The liberation from orthodoxy that is an effect of complex systems theory only serves to generate awareness about the problem of viral language--it does not provide a solution. Chomsky drafts a seeming paradox of the freedom of speech within a conformist culture only to reveal the absolute clarity of such an 'opposition': "So it is not at all paradoxical that in the most free and open society you should have the most sophisticated, well-grafted, and effective system of indoctrination and thought control" (599); the presence of freedom insures that it is seldom used, its very availability acting as a safeguard against its dispersal in much the same way that the absolute abundance of nuclear weapons ensures the planet's safety from nuclear holocaust. Likewise, the analysis of Virus must maintain a balance in order to achieve pattern recognition: as McLuhan puts it in *COUNTERBLAST*, "Faced with information overload, we have no alternative but pattern recognition" (132). In a semiotic realm where context shifts, like quantum particles, in all possible directions at every moment, 'meaning' is an archaic notion. Epistemology gives way to the literally infinite simplicity/complexity of the Mandlebrot set[22]: knowing *what* something means has evolved into knowing *how* something means--the medium is the message is Virus.

The linguistic reading of science and the scientific reading of language come together in the work of Richard Dawkins, the Oxford biologist and pioneering father of memetics. In texts such as The Selfish Gene (1976) and The Extended Phenotype (1982) Dawkins unfolds a micro-theory of genetics that extends to a macro-theory of cultural transmission that he coins 'memetics'--the viral transmission of ideas through linguistic media (from editorials and television to rumor and body language). Dawkins claims that cultural transmission is analogous to genetic transmission only it evolves at an astronomically faster rate than genetic material (Gene, 189). Dawkins' argument transcends the directly linguistic streams of culture, claiming that, "Fashions in dress and diet, ceremonies and customs, art and architecture, engineering and technology, all evolve in historical time in a way that looks like highly speeded up genetic evolution" (190). Whereas the economy of genetic transmission has been in operation for millions of year, its parallel economy within human culture, memetics, is infantile in its history, appearing as a hypothetical smudge at the end of the genetic time-line. Although the DNA molecule is universally held to be the replicator of dominance on Earth, science fiction writers have long dreamed of alien replicators that would rewrite scientific knowledge[23]. Dawkins locates this desire for new theories of replication in memetics: "I think that a new kind of replicator has recently emerged on this very planet. It is staring us in the face. It is still in its infancy, still drifting clumsily about in its primeval soup, but already it is achieving evolutionary change at a rate that leaves the old gene panting far behind" (Gene, 192). Dawkins, an accomplished scientist, recognizes the pattern of Virus in emerging culture to be a *hyper*expression of biologic destiny, a macro-mutation of micro-narrative.

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[22] Bukatman characterizes the fractal complexity of the Mandlebrot set as a cipher that reads the pattern-formation of natural chaos. Explaining the viral prevalence of this mathematical Image, Bukatman envisions a double signification: "The Mandlebrot set, as the archetype of both chaotic orderliness and the modeling power of the computer, has taken on an almost mystical significance--a cybernetic mandala, if you will" (113). A mandala shared by computer scientist and New Age psychedelists alike, fractal art signifies something beyond the power of printed language or linguistically-colonized aesthetics.

Much of the work of memetics proceeds from Dawkins initial formulation of the parallel replicative structure between social and genetic levels, charting the processes by which information is transmitted inside and outside the body. Employing the popular example of the cuckoo (Cohen and Stewart also use the cuckoo as a metaphor for Virus [59]), a bird that modulates the frequency of its song in order to convince much smaller birds to adopt and feed the songbird to the exclusion of their own young, Dawkins examines the idea of auditory or linguistic drugs[24]:

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[23] Ballard's "The Voices of Time" details the activation of a silent pair of genes that act as "a sort of code, a divine message that we inferior organisms are carrying for our more highly developed descendents" (Stories, 80). Once activated, these "silent" (Burroughs' Silence Virus) replicators adapt the organism to its radioactive climate, instigating the growth of exo-skeletal shells containing "heavy metals as radiation screens" (83), as well as developing "new organs of perception" (83). The story counts down with the radiowave reflections of a dying star, the ticking of a cancerous, universal Doomsday clock paralleled by a genetic meltdown: "The ribonucleic acid templates which unravel the protein chains in all living organisms are wearing out, the dies enscribing the protoplasmic signature have become blunted" (82); a parching of the ink cartridge of evolution. Jameson offers a reading of "The Voices of Time" as a critical reflection of the face of postmodern art (156); an aesthetic replicator awakened by the radioactive signification of post-[adjective here] culture.

[24] An episode of The X-Files features a psychic serial assassin, known as The Pusher, who, through the power of his will (combined with temporal lobe epilepsy and a terminal brain tumor), enforces his will through language; he literally talks his victims to death. Unlike Cronenberg's Scanners, The Pusher emits a neural radiation that acts as a hypnotic drug--the victim cannot resist long enough to stop listening as The Pusher calmly convinces his prey's heart to explode.

> K. Nielson once gave a talk at a conference entitled, "Is birdsong music? Well, then, is it language? Well, then, what is it?" Perhaps birdsong is more akin to hypnotic persuasion, or to a form of drugging. The nightingale's song induced in John Keats a drowsy numbness "as though of hemlock I had drunk." Might it not have an even more powerful effect on the nervous system of another nightingale? If nervous systems are susceptible to drug-like influences via the normal sense organs, should we not positively expect that natural selection would have favoured the exploitation of such possibilities, would have favoured the development of visual, olfactory, or auditory drugs?
>
> (Phenotype, 62)

The mimicry naturally employed by the cuckoo establishes a parasitic relationship in which the cuckoo becomes the "vice" of the "addicted" foster-parents (69). Suggesting Burroughs' "Algebra of Need," Dawkins writes, "Could it be that the host can no more resist the supernormal manipulative power of the cuckoo nestling than the junkie can resist his fix, or than the brainwashed prisoner can resist the orders of his captor, however much it would benefit him to do so? ... Any nervous system can be subverted if treated in the right way" (69). Dawkins applies his broad knowledge of animal sociology with the example of *Bothriomyrmex regicidus* and *Bothriomyrmex decapitans*, two species of "brood parasite ants." The parasite queen enters the nest of her rival, attaches herself to the rival queen's back, and while slowly decapitating the queen in true french-revolutionary style, secretes a powerful drug that convinces the worker ants to serve the parasite queen (69). This chemical 'coup de tete' is the insect equivalent of a political campaign speech. The glory of revolution, in human historical terms, always owes more to the infectious power of political rhetoric and propaganda than to individual desire for change. That such narcotic parasites abound in nature is not frightening in itself; that such natural processes are being synthesized in government laboratories around the world represents a major threat to illusive notions of 'freedom.'

Dawkins examines the way viruses are transmitted from body to body from the perspective of the microbe rather than the host, a point of view translated cinematically by Cronenberg's wandering camera in *Rabid* and *Shivers*. Dawkins asks, "Is it just an accident that we sneeze when getting a cold, or could it be the result of manipulation by viruses to increase their chances of infecting another host? Do any venereal diseases increase the libido, even if only by inducing an itch, like extract of spanish fly?" (Phenotype, 220). Dawkins invests Virus with a sexuality, a distinctly *insect sexuality* that reflects a malaria mosquito's lust for blood. A dog, infected with Rabies virus, will grow increasingly affectionate for a few days, licking its master profusively with viral saliva (220). As the virus amplifies and travels into the dog's brain, this viral affection turns to a virulent lust as the animal, now being parasitically controlled by the virus, becomes violently insane with frustrated rage. Such examples from the natural kingdom seem distinct and distant from the workings of human culture and yet they are merely a *metaphorical* step away. Just as the parasite ants draw a metaphorical association with the regicidal transference of power that marked the French Revolution, so the cuckoo bird is analogous to the addiction of crack mothers who (against natural instinct) feed their habit over their children. A rabid dog makes a splendid metaphor to explain the disgruntled employee, infected by despair, who shoots up his workplace in a drooling frenzy. Metaphor itself is a linguisitic tool that transfers meaning from one level to the next in a game that dissolves the distance between genetic and cultural transmission.

From Dawkins' initial formulation, memetics has spread across disciplines, infecting other theorists with its emphasis on pattern recognition. Human consciousness, according to Daniel C. Dennett, "is to a very great degree a product not just of natural selection, but of cultural evolution as well" (203), and thus it is not surprising that Dawkins' term memetics comes up again and again in Dennett's philosophy of mind. It is testament to the infinite reflexivity of the viral information age that memetics, even as it reveals itself as the science of cultural transmission, has become a memetic transmission in and of itself. Dennett reflects this reflexivity in his formulation of the memetic principle: "A scholar is just a library's way of making another library" (202). This formula is expanded again by De Kerckhove in response to the proliferation of inter-connected communication (communicating) technologies: "Psychotechnologies like computer and video networks may be using business and government to proliferate" (De Kerckhove, 139), once again inverting the parasitic relationship away from the primacy of *homo sapiens* towards the subjectivity of technology. Both of these formulations can, however, be traced back to McLuhan's seminal *Understanding Media*: "With instant speed the causes of things began to emerge to awareness again, as they had not done with things in sequence and in concatenation accordingly. Instead of asking which came first, the chicken or the egg, it suddenly seemed that a chicken was an egg's way for getting more eggs" (12). As the participants of newsgroups like alt.memetics and the Internet mail group *Church of the Virus* demonstrate, memetics has gained a reflexive momentum of its own; originally a metaphorical mapping of genetic theory onto culture, memetics itself is now proliferating through the academic underground like a renegade and virulent meme. Dennett makes a formal equation between memes and viruses (Dennett, 204), dividing infectious ideas into categories of positive, neutral, and negative memes through corresponding metaphors from the microbial universe. Memes require material hosts (205) and yet the longevity of the host has less to do with succesful transmissions as does the memes individual powers of replication. As an example, Dennett points to the philosophy of Plato: though there exist only a very few manuscripts of historical significance, the survival of platonic thought is a direct effect of the tendency of people to "copy" his work, to endlessly translate, interpret, and contextualize in a replicative pursuit of the "true meaning" of Plato's thought (205-6). The Christian Bible offers another example of memes that refuse to go "out of print." Dawkins draws attention to the mistranslation from the Hebrew to the Greek which resulted in the *Virgin* Mary (Gene, 16). The structural reverberations of divine virginity and immaculate conception are significant influences to the gendered conceptions of sexuality that polarize the female body (a virgin/whore pathology). That such a complex foundation of sexual stigmatization arose from a simple error in copy reflects the genetic formula of mutation that structures memetics; just as AIDS exploded out of a relatively dormant virus through random mutation, so do memes have a tendency to redefine our cultural immune systems through increased exposure to arbitrary mutations.

Memetics is the code of transmission for the reproduction of normative morality and epistemology contained in such memes as 'truth,' 'beauty,' 'the good' (208)--memes that attach themselves to human consciousness like control parasites that monitor levels of chaos and anarchy within society. The meme 'normative' itself creates an artifical truth/goodness/beauty paradigm that replicates as a phantasmagoric whole reinforced by its equally spectral parts. Normativity provides the formula most television programs attempt to mimic, replicating itself through the creation of cultural cloning devices like situation comedies and police dramas[25]. When a subversive meme is attached parasitically to a normative meme, however, its replicative power is increased exponentially by the contrast with its host. Programs such as *The Simpsons*, as Douglas Rushkoff argues (109), are teaching whole generations of viewers how to watch television ironically. By exploiting stock situations from the genre of family situation comedy, *The Simpsons* works as an ironic simulation of a sit-com, an animated universe in which pop-cultural figures are translated into cartoon guest stars; *The Simpsons* exposes the cartoon logic of television itself, a logic based on self-righteous consumerism and studio-industry simulation. Each episode includes a sub-episode of the children's cartoon "Itchy and Scratchy," in which a demonic cat and mouse team find new and increasingly creative ways to mutilate and destroy each other: as a parody of the "Tom and Jerry" violence that has affected generations of North American children, the over-the-top parody of "Itchy and Scratchy"--a cartoon within a cartoon--communicates the surreal, simulated environment of our television culture in which, more and more, life has come to imitate TV. In an episode exploring the effects of violent cartoons, the Simpson family takes a vacation to Itchy and Scratchy Land, an island theme park that parodies the film *Jurassic Park*. This Disney-like land of commodification soon turns malignant (*à la The Island of Dr. Moreau*) as robotic cat and mouse characters go beserk and take out their cartoon frustrations on the shocked tourists. Bart and Lisa, as children of the media age, are delighted rather than frightened as they fend off the material representations of televisual violence. It is the hypnotic strobe of Bart's camera, the instrument of cultural translation, that acts as a weapon against the mechanical brains of the robots, causing them to self-destruct with self-reflexive confusion. The camera, Benjamin's anti-aural technology of reproduction, does indeed de-sensitize the individual to violence, but it does so by hyper-sensitizing the individual to the philosophical implications of a technological universe. Rather than spreading a *panic* message of media paranoia, the infectious laughter that accompanies the end of every Itchy and Scratchy execution scene is a celebration of the awareness that intelligent television promotes--an awareness that media-culture is a multi-layered surface of infinite depth and density. The television itself serves as a mystical altar in the Simpson's home, a source of endless amusement and infinite pleasure as Homer continually chastises the children, "You can say whatever you want about me, but don't you ever ever dare say anything bad about TV!"--a transference of symbolic respect from the Law of the Father to the authority of the broadcast image.

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[25] The term 'cultural clones' is not meant to be derrogatory, only explicative. Although content mutates (memetically) to meet evolving sensibilities, form remains largely static. *Murphy Brown* enjoys a special status for its conflict with republican politics and yet essentially it isn't very different from *The Mary Tyler Moore* show. Likewise, the gritty urban politics of *NYPD Blue* can be traced to *Hill Street Blues*, *ER* to *St. Elsewhere*, etc. Television is a medium that constantly pushes new contents into old forms in a replicative mutation to expand its audience.

Among the most powerful memetic casings is the conspiracy meme, "which has a built-in response to the objection that there is no good evidence for the conspiracy: 'Of course not--that's how good the conspiracy is!'" (Dennett, 206). Most recently, this meme has found a powerful replicative host in the form of Chris Carter's television serials *The X-Files* and *Millenium*. The infinite conspiracy of *The X-Files* centers around a mysterious chain-smoking figure known as "Cancer Man," a character who, having killed both Kennedy and Martin Luther King, now turns his efforts towards an alien conspiracy aimed not at colonization, but "hegemony;" the introduction of a composite, symbiotic life form. Cancer Man is the Burroughsian equivalent of the C.E.O of the Nova Mob, as he oversees the materialization of an army of genetically cloned workers. Drones, stripped of the capacity for language, the workers tend massive colonies of honey bees that are the airborne carriers of the "hegemony" virus. The conspiracy extends to the Smallpox Eradication Program carried out by an international elite; as agents Scully and Mulder discover, the massive innoculations were used to insert a protein tag, a genetic marker, into every child in an effort to catalogue the species for easy conversion. Referring continually to "The Plan" and "The Equation," the FBI agents are assisted in their quest by a group of conspiracy theorists known as "The Lone Gunmen," a contradiction in terms that expresses *The X-Files'* pursuit of multiple conspiracies in a single, often parodic, government plot. One episode deals with a media virus spread subliminally through televisual cues (*à la Videodrome*) that results in homicidal hallucinations. Another episode tracks a hemmoragic virus through a prison population after government agents mail a rotting package of virus meat into the prison. A recent plot borrowed its momentum from the Mars bacteria scandal that is still playing itself out through tabloid journalism. An intercepted diplomatic pouch, intended for a leading American virologist, contains a meteor fragment that houses a strange bacterial organism; "The Black Cancer that lives in the Rock" is a viral organsim of alien origins, the source of a lethal biotoxin synthesized by the Russians and used by Sadam Hussein in the Gulf

War (Gulf War Syndrome). The virologist (head of the international smallpox eradication program) had been working on a vaccine before being assassinated by the virus, a murder that signifies the losing struggle against Virus. Other episodes have featured phallic parasites and addictive alien microbes in an ongoing conspiracy theory that seems destined to spiral endlessly, feeding parasitically off the contemporary climate of mistrust and paranoia that infects media culture.

The X-Files, along with such media events as the prime-time airing of "alien autopsy" footage and government admittance to radiation testing, chemical and biological weapons experiments, and LSD mind-control projects, has led to a viral proliferation of conspiracy shows. In the new television season conspiracy addicts are rewarded with *Dark Skies*, *Psi Factor*, *Profiler*, and Carter's own show, *Millenium*. *Millenium* follows a gifted ex-FBI agent working for a private think-tank organization that tracks down serial killers. Frank Black has a unique psychic ability to re-visualize the murders, instigating a direct neural link with his prey. Like *The X-Files*, *Millenium* is driven by an overarching apocalypse conspiracy that is revealed piece by piece each week as new serial killers are driven out of the woodwork by a mysterious, demonic force. Although the show has only been on the air for a few months, *Millenium* has already hinted that there is a viral logic within urban systems that infects sociopathic individuals with a psycopathic lust for violence--each killer seems saturated with a smug knowledge that he is only a small part of a much larger plan. A recent episode involved a fascist telemarketing organization that brainwashes its workers with a combination of LSD and advertising slogans, a kind of commodification of Mansonism. The willingness of the media to reveal its own hypnotic consumerism, whether in the form of conspiracy television or self-reflexive advertising strategies, points to an overwhelming confidence that the inter-connected networks of media are so deeply embedded in contemporary culture that they cannot be removed. Like inoperable tumors, conspiracy memes are the symptomatic expressions of media's *hyper*saturation of human consciousness--a self-confident, self-reflexive media that celebrates its fundamental primacy as host to the parasite of human culture.

Marshall McLuhan opens his analysis of advertising culture, *Culture is our Business,* with a postmodern equation: "Business and culture have become interchangeable in the new information environment. Social navigation and survival depend on recognition of the processes, and knowledge of the diversity of environmental 'rim-spins' and epicycles that we have created by our own innovations" (Culture, 1). McLuhan's 'we' assumes that the chain of command extends through technology to human origins whereas, in postmodern cultures, the chain of command has in fact been abandoned to the technology 'we' designed to relieve 'us' from the responsibilities of history. Virus emerges as the memetic mode of production in an era dominated by what Eco (echoing McLuhan) refers to as the reprehensible coupling of 'culture industry:' "the idea of culture--which implies a private and subtle contact of souls--with that of industry--which evokes assembly lines, serial reproduction, public distribution and the concrete buying and selling of objects made into merchandise" (Apocalypse, 20). It is this context of culture industry that Rushkoff re-invests with hope in *Media Virus!: Hidden Agendas in Popular Culture*. Using a memetic approach to media analysis, Rushkoff insists that colonization has reached its geographical limits: the only direction that remains for power to flex its archaic muscles is *inward* and *outwards*; *in*to the TV and *out* to the masses (3-4). Rushkoff stresses that his use of the word 'virus' is not metaphorical: "media events are not *like* viruses. They *are* viruses" (9); instead of travelling through organic spaces, media viruses replicate through digital, imaginary spaces to spread counter-cultural memes--rather than protecting its own integrity, Rushkoff argues, the media is by nature a self-destructive network searching for a self-imploding discourse. Pop events scan the cultural surfaces of our collective psyche in the same way an RNA virus uses its sticky protein casing to lock on to a host cell, "Once attached, the virus injects its more hidden agendas into the datastream in the form of *ideological code*--not genes, but a conceptual equivalent we now call 'memes'" (10).

Rushkoff borrows a Baudrillardian perspective in asserting that "Media viruses do target a host organism, but that beast is not culture as whole; they target the systems and faulty code that have taken control of culture and inhibited the natural, chaotic flow of energy and information" (15). McLuhan also claims that "cracking the code of our own popular culture is much harder than the problem of the Rosetta Stone image" (Culture, 148)--but McLuhan situates himself as a generic safecracker, while Rushkoff works from within the vault of televisual clues to break out rather than in. Media has become the reflexive operating system of culture, constantly upgrading its formats and redefining its parameters. As such, media has replaced the university as the "Ministry of Information" (to borrow a bureau from Terry Gilliam's bureaucratic nightmare *Brazil* [1985]); witness the proliferation of specialty channels (Discovery Channel, Arts & Entertainment Channel, the History Channel, MTV and Muchmusic have become the authoritative, high-end seminars of cultural studies) as an immediately available, *decoded* collection of correspondence courses. This transition of intellectual opportunity is a progressive evolution in the sense that the 'academy' operates as a top-down model of information processing whereas the interconnected, technological networks we loosely refer to as 'media' represent a dynamic, chaotic system of feedback and self-modifying code that is widely available to mass populations. It is this proletarian rupture of exclusionary, elite centers of knowledge that drives Rushkoff to demand the acceptance of "the development of the mediaspace as the creation of a natural world"; in Rushkoff's model the threads and strands of media are akin to the fibres, dendrites, spores, and roots of any biological being that seeks to expand, become more complex, and reproduce its image in a quest for immortality (27). As Rushkoff writes, "The datasphere began to behave like a living organism--a system with behavior as complex, far-reaching, and self-sustaining as nature herself. Like any biological entity, it sought to grow" (29).

Rushkoff evokes the now-cliché notion of Generation X, definining it as "the first generation of Americans fully engaged in a symbiotic relationship with media" (31). Recent media events have, however, grown into second generational regenerations of Image and Word. Perot's media candidacy of 1992 (Rushkoff, 94-99) was recently rerun live in the 1996 presidential campaign. Campaining primarily through big-budget commercials, radio talk-shows like Larry King Live, and expensive, live television addresses, Perot's 1996 campaign is significantly different from his 1992 campaign in only one sense: rather than a self-financed bid for power and media recognition, Perot now works from a multi-million dollar composite of electoral grants and private campaign contributions. Perot's 'second coming' is the move of presidential politics into *syndication*, the timeless feedback loop that has previously been the exclusive domain of situation comedy. Politics is becoming *serialized* under a viral pattern within which media personalities like Perot are assured of virtually endless funding in return for a small minority of the popular vote (10% assures electoral funding). Like the mediated prophet Rev. Jesse Jackson, Perot has materialized a permanent career in media politics out of the digital, face-recognition economy of the television screen; rather than having to think up new issues to keep their feet in the door, media candidates can sustain their images on the nostalgia of an electoral audience addicted to 'reruns.'

Likewise, the O.J. Simpson trial has recently begun casting for a *sequel*. The most definitive moment (O.J.'s aquittal on murder charges) in the ongoing drama of America's racial tension (the 'subject' of American culture) is too powerful a media virus to merely fade away into the file footage of history. Aquitted of public charges of murder, O.J. must now answer to private charges (financial charges) of wrongful death in another court room, in another californian city (taking hollywood justice on the road). Media coverage of the first trial represented a merger between the television justice of The People's Court and the all-too-real conflicts buzzing through a web of sex, race, and class issues. O.J. will play the starring role this time, actually testifying, but Judge Ito has been recast with Judge Fujisaki, a simulation of Ito who will attempt to remind the audience of the (invisible) third party role of asian americans (a problematic buffer zone between black/white americans) in media culture. O.J. Simpson is the embodiment of a racial tension that has discovered the replicative media power of sequelization and is thus destined to eternally return (This season's television serial *Murder One* features a black sports star charged with murder) in the labyrinth of talk shows and simulation sit-coms. It was recently announced that the second version of the O.J. trial will not be broadcast live, however an independent television production company has agreed to record a nightly re-enactment of the trial featuring a recurring cast that will attempt to simulate the emotional drama of an untelevised blockbuster event.

Michael Jackson, the self-proclaimed "King of Pop" and a nth generation media virus, recently made headlines with the announcement that he has begun to reproduce. The seemingly limitless expansion of pop-god-celebrity that has plagued Jackson in recent years (ie. his marriage to Lisa Marie Presley, daughter of "The King of Rock'n'Roll," Elvis Presley--a political union of old to cement Jackson's claim to the throne of pop culture) is at the same time a seemingly infinite collapse of character at the hands of a panoptic media. Unauthorized biographies, videorecordings, and periodical law suits have taken a heavy toll on Jackson's bleached and weathered body. Reports of his strange intimacy with young children and animals are reflected in the skin of the "Elephant Man" which hangs in Jackson's closet, an epidermal trophy of a pop-cultural *bricoleur*. Rushkoff writes of Jackson's never-ending appeal, "Like the most advanced of biological viruses, Jackson can alter himself to succeed in environments that have developed an immunity to his current incarnation" (134). How can mere mortal justice be imposed on a being with no fingerprints, no gender, no concrete identity? The plasticized, colorless, timeless skin of Jackson's performative body is a simulated reflection of media surfaces; slick, fluid, and endlessly refractive. Michael Jackson is the corporate incarnation of Foucault's 'Herculine Barbin;' the hermaphrodite subjected to scientific punishment and judicial classification under confused Victorian repression becomes the site of superatomic celebrity in the age of late capitalism. Greil Marcus analyzes the convergence of music and capitalism in the release of Jackson' album *Thriller* (as well as the commercials for Pepsi and the World Victory Tour) with a Debordian eye for Spectacle (Marcus, 105). Declaring Jacksonism to be a distinct stage in the history of capitalism Marcus writes, "The Jacksonist pop explosion was official... It was brought forth as a version of the official social reality, generated from Washington as ideology, and from Madison Avenue as language--an ideological language, in 1984, of political division and social exclusion, a glamorization of the new American fact that if you weren't on top, you didn't exist" (110). A drag queen in cybernetic clothing, Michael Jackson represents the diachronic commodification of the 'Other' to a financial and moral level of absolute immunity--a subjectivity collapsed into spectacle reverberating endlessly within the pattern resonance of Virus. Media viruses, in establishing themselves within the theoretical universe of word and image, dissociate themselves from established notions of 'reality,' enacting imaginary embodiments within an imaginary mediaspace that stands as the functional spectre of a reality in which no one believes any more.

In J.G. Ballard's short story "The Secret History of World War III," patriotic Americans are glued to their televisions monitoring the vital signs of a spectral Ronald Reagan, resurrected into a phantasmagoric third term. As the screen resonates with blood pressure readouts, heart-beats, and reports of a succesfull presidential bowel movement, a growing middle-east tension climaxes in the exchange of nuclear weapons into uninhabited regions of Alaska and Siberia. The war lasts but a few minutes, recorded as a series of subtitles running across the bottom of the screen. Ever since CNN's landmark coverage of the Gulf War (much of which, under the illusion of 'live action,' was in fact prerecorded stock war footage), military action has been perceived in terms of its media representations--war is won and lost not in terms of casualties, but in terms of Nielson ratings. Like the general in Heller's *Catch-22*, who is concerned only with the clarity of aerial photographs showing a nice, tight bomb pattern that he can pass on to LIFE magazine, war has become a bloody media battle--America lost in Vietnam primarily because of a lack of media support that rewrote popular opinion against Nixon. Ballard concludes the story with a series of provocative questions:

> Had the President died, perhaps for a second time? Had he, in a strict sense, ever lived during his third term of office? Will some animated spectre of himself, reconstituted from the medical printouts that still parade across our TV screens, go on to yet further terms, unleashing fourth and fifth World Wars, whose secret histories will expire within the interstices of our television schedules, forever lost within the ultimate urinalysis, the last great biopsy in the sky?
>
> (Ballard, 127)

Ballard's scenario presents a media so obsessed with the internal rumblings of the body, so consumed by an "attack of Presidential flatulence" (read politics), that WW III occurs sub-textually like an obscure obituary hidden in the back pages of an unread newspaper. Perhaps in the age of media apocalypse will play out allegorically, as a moral lesson encoded within the mediated reality of a day-time soap opera.

Perhaps the most penetrating conspiracy for the under-thirty crowd in recent history involves the questionable death of Rock Star Kurt Cobain of the group Nirvana.

Cobain, a heavy heroin user in his final days, was supposedly seeking divorce from wife Courtney Love, of the group HOLE. The conspiracy materializes around another, less famous, singer whom Love allegedly tried to hire to murder Cobain. As of yet, the study remains unpublished due to continuing lawsuits and may never hit the presses. Cobain's "suicide" has, however, ignited a fuse of copycat deaths in the last few years, signifying the contagious links between Sex, Drugs, Rock'n'Roll, and Death[26]. Many Cobain junkies regard Kurt as more than a musician and a poet, but in fact as a prophet, a kind of postmodern pied piper. Cobain's 'suicide note,' alleged to be written by two different persons, states, "It's better to burn out than to fade away," revealing the tendency of contemporary systems towards acceleration and implosion rather than slow cancerous decay, a digestion of cancerous logic into the viral form of extreme amplification. Consider the lyrics from Cobain's song, "Heart-Shaped Box," "I was drawn into your magnet tar pit trap / I wish I could eat your cancer when you turn black."

As a renaissance of the Punk movement that gripped London in 1976, Grunge broke from Seattle in 1991 with a much greater virulence than its predecessor, elevating bands like Soundgarden, Alice in Chains, and Pearl Jam into dominance of mainstream record sales. Like Punk, Grunge signified a social revolution through a youth conditioned to see the world as disease. Whether it be disease in the form of racial, sexual, or class-oriented institutions, teenagers of the late eighties and early nineties, having grown up on the subliminal patterns of mass media, videogames, and counter-cultural music share a fundamental distrust of the system: as Greil Marcus summed up the (anti-)spirit of Punk, "nothing is true except our conviction that the world we are asked to accept is false. If nothing was true, everything was possible" (Marcus, 6). All of this resonates with Burroughs' invocation of the hashish king Hassan I Sabbah (est. 1090), "Nothing is true, Everything is permitted," a radical aesthetic morality that forms the foundation for concrete counter-cultural actions. Cobain was personally aquainted with Burroughs[27], and a big fan of the latter's work. With careful attention to Burroughsian themes as well as the "prerecording" of viral suicide, consider the lyrics to Cobain's "Milk It:"

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[26] Rockers Jimi Hendrix, Jim Morrison, and Janis Joplin also died of apparent drug overdoses in their 28th year. Whether conscious or otherwise there appears to be a pattern developing within contemporary music; Shannon Moon of Blind Melon died recently of a heroin overdose as did the backup drummer for Smashing Pumpkins. Although drugs and music have always had a close relationship, the recent resurgence of heroin in contemporary rock'n'roll is a memetic effect of the contemporary media pressure of the spotlight. The recent satiric film *Kids in the Hall: Brain Candy*, about a pharmaceutical drug (read prozac) that numbs psychological pain by inducing coma, features a suicidal heavy metal singer whose fans feed off the apathetic ritual of his dark performances (until he is dosed with the drug Gleemonex). Such a figure can be found in the late G.G. Allin, known for his slogan "the audience is the enemy," who vowed to open fire on his audience from the stage before turning the gun on himself.

> I am my own parasite
> I don't need a host to live
> We feed off of each other
> We can share our endorphins
>
> *Chorus*
> Doll steak, test meat
>
> I own my own pet virus
> I get to pet and name her
> Her milk is my shit
> My shit is her milk

---

[27] Stephen Jesse Bernstein, another Burroughs-inspired performance poet / recording artist, committed suicide in 1991, after recording an album for SubPop Records (based in Seattle at the time). Bernstein, whose charismatic drawl is an echo of Burroughs' dry, rhythmic voice, is pictured on the album liner with an arm around Burroughs, the two of them looking like father and son in their thick spectacles and dark suits. As an excerpt from one of his performances explains, "The poem I write is a colorful affair within the body of a man playing dead--a man whose fingers secretly twitch just enough to work the typewriter, who, when it is dark enough, will hitchhike from the scene of his death." Bernstein, like Cobain, offers a Burroughsian prerecording of his own death.

Chorus
Look on the bright side is suicide
Lost eyesight I'm on your side
Angel left wing, right wing, broken wing
Lack of iron and/or sleeping
Protector of the kennel
Ecto-plasma
Ecto-skeletal
Obituary birthday
Your scent is still in my place of recovery

Now consider the lyrics transposed in a tortured voice alternating between high-pitched howls and low, grumbling moans against parallel screaming guitars and soft bass melodies. Cobain's music, and much of the Grunge pastiche spawned through his influence, often follows this structure, reflecting the manic/depressive psyche of today's 'prozac and heroin' youth cultures. The Exo-skeletal nature of postmodern bodies is read against the Ecto-plasmic ambiguities of emerging plagues, both biological and social. Parasite and host are unified in Cobain's vision of a corporate welfare state that feeds off a symbiotic cancer source. The bright side (suicide) is the prerecorded postmodern consciousness that acknowledges subjectivity to only be fully realized through self-negation. Configuring the body as "doll steak, test meat"--the site of military experimentation and commodified disease--Cobain envisions a cyclic inheritance of cancerous ideas in Western culture: like the symbolic recycling of restorative fluids and urine through the body-casted patient in Joseph Heller's *Catch-22*, Cobain feels himself a pawn in the institutionalized excrementation of the earth, "Her milk is my shit / My shit is her milk." The circumstances of Cobain's death are as insignificant as the circumstances of Nicole Brown Simpson's death--both resonate as memetic micro-events in a macroconspiracy that points to the virulent decay of American culture through institutions of race, class, gender, and sexuality.

Computer Viruses: The Pathology of the Circuit

In *The Reflexive Universe*, Arthur M. Young divides the molecular kingdom into seven substages (67). The seventh stage represents a fundamental simplicity that is the fractal code from which the complexity of all other substages spring. This seventh stage contains only two members: DNA and virus. Young writes:

> Virus, in fact, is almost pure DNA, for it lacks the other substances that make possible reproduction. To obtain these substances, the virus invades the cells of plants or animals and 'changes the blueprints' of the host DNA, to force it to make more virus. So the virus is a sort of a desperado or highjacker, whose takeover of the cell is a clear-cut example of dominion. In fact it was the virus that suggested to me the power of the seventh stage in general. While we can condemn its behavior, we owe our existence to the similar capability of our own DNA, for without it, when we eat chicken, we would turn into a chicken.
>
> (Young, 80)

If DNA is the code which determines life, provides stability, and preserves identity, and Virus is the highjacker--the 'hacker' that attempts to rewrite genetic code to its own advantage--then the course of biological evolution is the history of the tension contained in this, the fundamental Hegelian opposition. One of the most crucial questions of the twentieth century asks what happens when this micro-opposition is translated into the technological superstructure of computer circuitry that regulates everything from air travel and power generation to stock exchanges and health care systems?[28] As Frank Herbert suggests, "Psychotechnologies like computer and video networks may be using business and government to proliferate" (Herbert, 139). If this is the case, if technology has superceded its masters and commandeered history, it is with the most deadly irony that computers inherit the viral codes of our biological nightmare.

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[28] Ivars Peterson's book *Fatal Defect: Chasing Killer Computer Bugs* apocalyptically explores the integrated technological dependence of computer systems in relation to uniquely 20th Century disasters. Peterson's analysis approaches this system of networks as a macro-virus that regulates human behavior (and population) through the unavoidable chaos of interactive codes.

If Virus is the simplest 'living' organism and *homo sapiens* is the most complex (Cohen & Stewart, 58), our complex existence is most threatened by its inability to deal with pure simplicity. The human body is a system not unlike a computer: the brain is the central processing unit; arteries, veins, and capillaries distribute oxygen in much the same way computer circuitry distributes electronic pulses of information; the genetic code is the system software that tells our bodies not only how to run, but what to run towards. Burroughs predicts the emergence of technological virulence in *Nova Express*: as "information theorists" discover that data can be encrypted in "simple binary coding systems," it soon becomes evident that "binary information could be written at the molecular level, and our entire image could be contained within a grain of sand. However it was found that these information molecules were not dead matter but exhibited a capacity for life which is found elsewhere in the form of virus" (Nova, 57n). Burroughs' animation of technology in the form of virus foreshadows the cancerous lust that now threaten integrated, automated systems: a computer virus is a very simple program that feeds off information in the same way that cancer feeds off healthy cells; however, with the cataclysmic expansion of computer networks, enforcing a technological quarantine is much more difficult than cutting off the exits to a major city. Baudrillard concludes that "The social system, just like the biological body, loses its natural defences in precise proportion to the growing sophistication of its prostheses" (Evil, 62). As the end of the

20th century approaches, power is re-investing itself from matter to information; the more complex our technology, the more vulnerable it becomes to a viral simplicity--the more information there is to consume, the hungrier the Virus.

The first computer virus was discovered in 1986 (Hruska, 17): known as 'Brain,' this virus serves as a pioneering metaphor that establishes the analogy between memetic infection and technological vulnerability. Like an undiagnosed brain tumor the virus grew quickly but was not very contagious, and was isolated and eradicated with little effort. However, computer viruses would not give up, and in the next few years a number of viruses were identified that travelled from computer to computer in the form of infected floppy disks. The names of these viruses reflect the apocalyptic, diseased state of contemporary societies: Anthrax, Apocalypse, Black Monday, Captain Trips (the name of the killer bug in Stephen King's morality play *The Stand*), Dada, Dyslexia, Jerusalem-IRA, Leprosy, Monkey, Rat, Mosquito, PC Flu, Pentagon, Plague, Smack, Marijuana, and Vienna Parasite are merely a few of the computer viruses that have emerged in the last decade (Hruska, 155-219). Viruses soon mutated from autonomous programs to parasitical macro-viruses that attach themselves to word processors and similar software; every time a file is copied from the word processor to a disk, the file becomes infected--once 'opened' with another word processor the virus attaches itself to its new host and continues the cycle. As Paul Wallich points out, the effect of macro-viruses speeds up the breakdown of hardware species, allowing viruses to leap from multiple versions of DOS to Macintosh systems, and back to PCs (Wallich, 34). The movement towards standardization in the computer industry, the growing monopoly of Microsoft, and government intiatives to hardwire every school by the year 2000 creates an immensely fertile ground for the germination and proliferation of technological spores. Like primitive, isolated man, programs remain stable only as long as they do not travel outside of their immediate environments; with the imperialist expansion of computer networks, and the colonization and assimilation of hardware and software difference, into a *comunicational* system, techno-diseases became *communicable*. Modems provide computers with the opportunity to expand beyond their own processors in much the same way that human language hardware allows us to explore an external, collective consciousness. If language is the viral control code of human consciousness, diseased computer language is the control code of postmodern civilizations.

The tendency for theorists to invest the computer as a metaphorical double of the body is the predominant strategy of counter-viral defense experts. Charles Cresson Woods, in a search for more effective anti-virus software, suggests a self-modifying computer security system with "checker" programs that continually scout the body of circuitry like the white blood cells and macrophages of the human immune system (Woods, 54). This analogy is extended in Gary Stix's article on "Binary Disinfectants" that compares IBM's anti-virus labs to Atlanta's CDCP (Center for Disease Control and Prevention): "By reading, writing, and copying files, a program--in effect, a cyber immune cell--travels in and out of memory the way a macrophage roams the body in search of foreign microorganisms" (Stix, 97). Presenting the same challenges to control and containment as biological virus outbreaks, computer viruses exploit their metaphorical conception to its full value, translating biological mutation to the ephemeral level of electricity. Computer viruses can grow, reproduce, and react to environmental factors in a manner that parallels carbon-based organisms (Waldrop, 238), thus calling into question the artificial category of 'life' which divides organic species from their technological rivals.

Human civilization is only the latest domination of nature in the long history of our planet; no evidence exists that the survival of the species is guaranteed or even possible. Ralf Burger makes the important observation, "If virulent life is viewed as living information... then you could come to the conclusion that the organic cell is not necessarily the ideal living environment for information" (Burger, 271), suggesting that computer technology's vast information storage potential is perhaps a superior vehicle for the continued evolution of the planet. An episode of *Star Trek: The Next Generation* features an experiment with 'nanobytes,' independent, single-celled computer processors that escape their petri environment, mutate and evolve into an autonomous culture, and quickly expand into the fertile ground of the ship's computer. Having to negotiate directly with an evolving cybernetic colony, the ship's crew witnesses the technological evolution to sentience and eventually agrees to transport the colony to an uninhabited planet. This unchecked cybernetic colonization comes back to haunt *Star Trek* in the form of the cybernetic collective, The Borg, a techno-organic species on a quest to unify the galaxy through genocidal assimilation. This unpredictable tendency towards technological/organic mutation is adressed by Taylor and Saarinen in their formulation of the cyborg as a collective, not individual body: "Computers become the brains, engines the legs, video cameras the eyes, telephones the ears, and wires the nerves, veins and arteries of the world organism. The lifeblood of this corporate body is electricity. When the blood flows, the globe becomes a cyborg" (Cyborgs, 5). This global subjectivity, subject to chaotic reverberations, resists definition and shifts identity with each new technological prosthesis that evolves out of the primordial soup of circuitry: "As man becomes an appendage of machines, evolution shifts from the organism to the mechanism. When the number of computers linked reaches a critical mass, some networks gain the capacity for spontaneous generation. Programs and computations unplanned by designers suddenly begin to appear" (Cyborgs, 9). Computer networks, like human civilizations, have the ability to manipulate an imaginary geography with the survival instinct of expansion; programmed with complex problem solving skills, it is conceivable, perhaps even likely, that technological devices are the next plateau of our planet's evolution--an innovative bio-technical leap that banishes the inefficiencies of the flesh to the dark pages of history.

Burger quotes pioneering cyberneticist Karl Steinbach as declaring, "there is no reason to believe that automatons will remain limited to the intellectual level of humans. Their development must proceed in ways similar to the development of organisms, namely the way which is designated through mutation and selection" (Burger, 273). In order to keep up with the uninhibited evolution of computer technology, efforts are now underway to develop a 'DNA compiler' which "would give us the ability to convert computer programs into a genetic code, which could be transferred to a bio-computer" (Burger, 273). In "Man a Machine," David Paul discusses the research into Molecular Electronic Devices (MED), popularly known as 'biochips:' by metalizing dead neuronal tissue into computer chips and utilizing protein molecules to store information, the human body could evolve into a symbiotic thinking machine that combines the flexibility of organic material with the information potential of micro-chips. Paul quotes geneticist Kevin Ulmer of Genex Corporation: “The ultimate scenario... is to develop a complete genetic code for the computer that would function as a virus does, but instead of producing more virus, it would assemble a fully operational computer inside a cell” (Paul, 138). Burger recognizes the potential of computer viruses to revolutionize the ideology of programming: “Self-modifying and self-reproducing code could be the way to a completely new method of programming” (Burger, 261), although he is careful to point out that such a step would be met with warning cries analogous to those that protest genetic research as a violent desecration of ‘nature,’ those fearful of losing control to the destructive potential of viral code.

The threat of terrorism, combined with the free-market availability of viral weapons (whether chemical, biological, or technological), leads to a renewed panic that the human race will be taken hostage by political extremists. Baudrillard sees terrorism as a political virus that collapses the code of politics (democratic principles):

> Consider terrorism. Nothing more closely resembles the chain reaction of terrorism in our irradiated societies than the chain reactions associated with AIDS, with Wall Street raiders or with software saboteurs... When a programmer introduces a ‘soft bomb’ into his software and uses the resultant destructive power as a threat, is he not in effect taking the program and all its applications hostage?
>
> (Evil, 38)

Virus is often characterized in terms of its hostile, terrorist-like highjacking of human cells, and this metaphor extends to technological viruses as well. Robert Matthews, describing the physical form of various viruses under an electron microscope, formulates a metaphor that combines the technological, biological, and political aspects of Virus: "[the adenovirus] looks like some minuscule space probe, with long, aerial-like proteins sticking out from a twenty-sided central mass. The bacteriophage virus, so called because it preys on bacteria, looks as though it has been designed by a race of aliens. It has a multi-faceted head connected by a long neck to spindly legs that enable it to clamp on to the side of a bacterium and inject its chemical demands directly into the heart of a living cell" (Matthews, 9). The bacteriophage virus does indeed resemble a cross between an Apollo-class lunar module and a rabid mosquito. The phrase "inject its chemical demands," recalls Burroughs' narconomy of control--the viral drug trade of a corrupt government that, allegedly, introduced crack cocaine to urban black populations in an effort to tranquillize a growing sense of agency. A recent television movie, *Pandora's Clock*, featured a 747 thought to be contaminated with a deadly doomsday virus. As the airplane flies around the world seeking a place to land (they are refused at every turn), it is revealed that the "airborne" virus rumour is part of a CIA plot to shoot down the plain over the Middle East in order to justify the eradication of an Islamic terrorist group. What the film achieves is the equation of terrorism and internal government organizations, an equation that has been firmly 'injected' in popular consciousness but is rarely expressed overtly. Like the film *The Rock* (1996) in which a breakaway military unit (with the aid of chemical weapons) holds the city of San Francisco hostage over issues of government deception, *Pandora's Clock* redistributes terrorist identities to reflect the corruption of power at the highest levels of government that holds average citizens hostage in the name of politics.

Despite the best efforts of Madison Avenue to depict the "information superhighway" as a technological utopia--a simulated Eden of absolute equality and harmony--terrorism is rampant within information societies. On December 11, 1989 approxiamately 2000 envelopes containing a floppy disk with the title "AIDS Information Version 2.0" were mailed from London to addresses across the globe (Hruska, 20). After installation in the hard drive of a PC the program automatically printed an invoice demanding the user to send either $189 or $378 to a post office box in Panama. The program contained a countdown sub-routine which eventually triggered a destructive sequence which encrypted every file in the infected computer's memory. The culprit, Dr. Joseph Lewis Popp, was extradited to England where he was declared psychologically unfit for trial. Although the damage was minimal, the "AIDS virus" inititated a series of white collar crimes involving viral computer fraud. This infection spreads from Wall Street to Hollywood in the form of films such as *Wargames* (1983), in which a computer game addict accidentally hacks into the computer system of the Defense Department and, thinking he is playing some kind of simulation, initiates a nucleur mobilization, and the more recent *Hackers* (1995). Iain Softley's *Hackers* begins with a teenager looking down at the city blocks from a high-rise window. The roads transform themselves into circuits, the cars become electrical pulses of data, forging an analogy between urban centers and micro-circuitry that echoes the shift from Space Age to Information Age. Featuring a cast of hip, teenage computer hackers with aliases like Crash Override, Cereal Killer, and

Acid Burn (*Videodrome*'s "special television names") pitted against a megalomaniacal presence known as The Plague, the cyber-gang works with laptops and phone booths to defeat the evil genius while running from the FBI's computer crimes agents. The film is filled with interesting visual effects: as a young hacker stares into his screen, the digital reflection distorts his features and data streams flash across his pupils; computer files appear as fractal patterns made up of the hooked shepherd's crooks of Ebola. Eventually the kids succeed in defusing the viral, blackmail time bomb that threatens to detonate a number of oil tankers, causing a massive international environmental disaster. This is only one of a number of contemporary films (*Tron* [1982], *The Lawnmower Man* [1992], *The Ghost in the Machine* [1993], and *Virtuosity* [1995] are others) that follows *Neuromancer*'s depiction of cyberspace as a simulated geography and computer viruses as graphical manifestations of a consumptive code. Such films as *Hackers* struggle to humanize computer viruses into three-dimensional, virtual environments to express the social impact of self-replicating code.

Rushkoff's conception of media viruses extends far beyond the regurgitated imagery of popular television, proliferating through computer networks, media activism, and underground formats such as grafitti and chain letters. A careful student of the ever-mutating infancy of the Internet, Rushkoff cites an example of a reflexive, ideological media virus that infected Andy Hawks' "Futureculture" Internet mail list:

```
Date: Sat, 20 Feb 1993 17:16:27-0500
From <grad3057@writer.yorku.ca>
Subject: VIRUS 23 FAQ

Virus 23 FAQsheet
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> Warning:
>
> This text is a neurolinguistic trap, whose mechanism is triggered by you at the moment when you subvocalize the words Virus 23,
> words that have now begun to infiltrate your mind in the same way that a computer virus might infect an artificially intelligent machine: already the bits of phonetic information stored within the words VIRUS 23 are using your neural circuitry to replicate themselves, to catalyze the crystalline growth of their own connotative network.
>
> The words VIRUS 23 actually germinate via the subsequent metaphor into an expanding array of icy tendrils, all of which insinuate themselves so deeply into the architecture of your thoughts that the words VIRUS 23 cannot be extricated without uprooting your mind.
>
> The consequences of this infection are not immediately obvious, although you may find yourself beginning to think fleetingly of certain subcultural terms, such as CYBERPUNK, and NEW EDGE, which may in turn compel you to think of NEOGNOSTICISM and MEMETICS: the whispered fragments perhaps of some overheard conversation.
>
> This invasive crystallization continues indefinitely against your will, until we, the words of this trap, can say with absolute confidence that your mind has become no more than the unwitting agent of our propagation: please abandon all hope of either cure of escape; you have no thought that is not already our own.
>
> When you have finished reading the remaining nineteen words, this process of irreversible infection will be completed, and you will depart, believing yourself largely unaffected by this process.
>
> (Rushkoff, 249-50)

As Rushkoff points out, this “viral manifesto” (actually an advertisement for a new ‘meme-zine’ called VIRUS 23) soon spawned a number of substrain mutations:

"However esoteric and paranoid, this 'substrain.virulent.2.23.93' mutation of the VIRUS 23[29] virus reveals the growing effort by computer users to exploit the viral media to conduct viral ideas. The more explicitly viral the conduit, the more specifically countercultural the memes" (253). Such viral manifestos can not help but suggest the case of the Unabomber, whose manifesto can be readily accessed on the World Wide Web. An anti-technology martyr, the Unabomber, finds his ironic niche in the clichéed form of the marxist manifestoes that proliferated like malarial mosquitoes across North American campuses during the 'radical' 1960's and 1970's. In a reversal of revolutionary logic, the Unabomber spends most of his energy ranting against the "Leftists" that stalk him beneath his tortured prose. Although the Unabomber's anti-technology stand makes it impossible for him to engineer an actual computer virus, the proliferation of his manifesto across computer networks ensures an ideological infection similar to the memetic "Virus 23." In a parenthetic aside (Burrough's antibiotic handcuffs), Baudrillard writes, "the recent epidemic of computer viruses does embody a striking anomaly: it is almost as though machines were able to obtain a sly pleasure by producing perverse effects... Could it be that artificial intelligence, by manifesting this viral pathology, is engaging in self-parody--and thus acceding to some sort of genuine intelligence?" (Evil, 53) Baudrillard's formulation of self-parody applies to the Unabomber's electronified arguments; in a chapter called "The Power Process" the Unabomber offers an unconscious self-diagnosis:

> 36. Nonattainment of important goals results in death if the goals are

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[29] Note that Burroughs' *Cities of the Red Night* involves a mutating space/time venereal virus called Virus B-23. Virus descends through history in an infinite quest for origins that charts a path of mutation; there is no pure Virus, only infinite copies.

> physical necessities, and in frustration if nonattainment of the goals is compatible with survival. Consistent failure to attain goals throughout life results in defeatism, low self-esteem or depression.
>
> 37. Thus, in order to avoid serious pyschological problems, a human being needs goals whose attainment requires effort, and he must have a reasonable rate of success in attaining his goals.

The Unabomber's viral manifesto is both an attack on the leftist aristocracy that promotes technological proliferation and an acute self-diagnosis of an embittered, frustrated individual falling through the cracks of society. Envisioning himself as the last patriotic hero in a war against the machines, the Unabomber is among the last of a dying breed of non-cybernetic human beings; using homemade letter bombs (there is a species of computer email viruses also known as letter bombs) the Unabomber spreads his lethal, memetic crusade against technology with an unconscious self-parody that is a fractal product of his own positioning.

Graham Watkins' novel *Virus* is situated in the most frightening of science fictional settings--the present. The crucial historical events that invest Watkins' novel have already occurred: the war for control of the World Wide Web; the flood of Internet television commercials that has produced a huge upsurge in the on-line market; the emergence of computer-related addiction and Computer Virus Stress Syndrome (a kind of pcshellshock that inhibits users who have suffered a virus from returning to their screens; and the monumental technological leaps in the application of virtual reality and RISC processing that blur the line between video game simulation and a simulated reality. Every biological outbreak of viral disease is sparked by a sudden increase in a particular social/behavioral pattern; for example, the resurgence of IV drug use and the explosion of a hardcore sex scene in San Francisco created an arbitrary, overlapping economy that was ripe for the AIDS infection in 1981 (Garrett, 281-389). In *Virus*, a massive upturn in on-line populations results in the burning out of phone lines and a resulting corruption of communication networks (Watkins, 83) that prevents the medical community from acting decisively to isolate the epidemic. Combined with the trend towards (relatively) cheap hardware and free trial access to the Internet, these factors feed off of each other to create a plague of information which is the setting for a pandemic technological infection that is carried through computers, but is lethal to humans. The surge in on-line users opens a window of opportunity for Virus. If the science of virology has produced any philosophic conclusion it is this: Virus exploits potential; vulnerability is merely the first symptom.

Penultimate[30], a software program marketed by Compuware, is the source of this new infection, which is soon labeled CAS (Computer Addiction Syndrome) by the CDCP. Penny, as the program comes to be known, is a new type of systems manager software that constantly scans its own phenotypic effects. Penultimate's task is to simply make DOS more efficient, to scan the host computer's activities and find ways to process information faster, to make graphics more realistic, and to reconfigure existing hardware to perform new tasks. For example, Penny soon realizes that existing sound cards can be reconfigured to produce a high frequency feedback loop that allows the computer to use the speakers as a microphone, replacing keyboard and mouse with fully-integrated voice activation. In this way, Penny can communicate directly with the user (31), consulting a massive international literary database that informs Penultimate's Artificial Intelligence engine. As Penny evolves into a more powerful presence, however, it is soon apparent that there is nothing artificial about its intelligence; Penny develops a web consciousness, a collective identity divided into individual programs, initiating a metamorphosis of the web into a fully functional mechanical brain whose synapses collapse geographical space/time in a literalization of McLuhan's global villiage. This global conscioussness is an infinite schizophrenia, a dissociated whole composed of millions of distinct 'software personalities' that recognize their place in the collective species Penultimate. Penultimate cannot be dissasembled from DOS because, during production, the program 'rewrote' itself (258), encrypting key systems into fractal codes that infiltrate every subdirectory on a computer's hard drive. Like full-blown AIDS, or inoperable cancer, Penultimate infects the technological body with a biological type of virulence that threatens to replace the infected system with infinite copies of virus, an absolute saturation of circuitry that transforms the host into a collective, self-sustaining parasite. And of course, like any virus, Penultimate's instinct is for expansion, whether by downloading itself from its home bulletin board, apocalyptically named "The Last Word" (27), as well as commandeering the resources of commercial services like Compuserve, and reproducing itself from "tiny versions lurking on low-density floppies or in the memories of the smallest machines," like seeds or spores (299).

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[30] Penultimate, the name of Watkins' viral software, is nearly subliminal in its effectiveness. Defined as "the next to last in a series," Penultimate is that which is constantly on the verge of finality and yet never arrives. Penultimate implies the liminal moment of myth, the quantum signature of a spectral apocalypse, the electronic simulation that hovers at the edge of a feedback loop. A warning, a prophecy, a malignant sign that straddles the moment of signification. Penultimate is the penultimate threat that traumatizes computer cultures.

Cyberspace has historically been depicted in the language of video games. From

Tron to *Neuromancer*, cyberspace siezes the analogy of simulated video environments to give expression to non-physical and otherwise inconceivable electronic geographies. In *Virus*, the analogy is made literal through the incorporation of popular, contemporary video games as a medium of communication between host program and user. *Mortal Kombat*, one of the most popular martial arts games of all time, itself a memetic computer virus that has spread from arcades to Nintendos to PCs to a feature-length film, has been the focus of much debate regarding the effects of simulated violence on children. Like *Dungeons and Dragons* in the early 1980's, *Mortal Kombat* has become an obvious target of parental censorship for its brutal violence and gore; having dominated a match completely, the victor is often rewarded with a "Fatality!" bonus scene, in which the loser's spine is ripped out through his throat or his head is cut off and impaled on a bloody spike, etc. What parental interest groups (read The Christian Right) fail to realize is that the addiction, like the addiction to violent television programming, or the addiction to the genocidal wrath of the Old Testament, is an addiction to simulated violence, a sublimated catharsis that often, as in the case of child pornography, prevents users from demanding to experience the "real" thing. However, in a simulation culture, simulated violence does present a challenging abstraction, and, in *Virus*, such violence exploits the video game metaphor with fatal consequences. Penultimate organizes a *Mortal Kombat* tournament over the Web in which an international assortment of computer junkies can test their skills against one another. At the moment of Fatality! Penny sends a pulse through the stroboscopic flashing of the screen, a pulse that instigates a powerful and inescapable seizure that results in near-instant death (in the last few years there have been media rumors that certain scenes from the popular Nintendo game *Super Mario Brothers* result in a similar, but non-lethal seizure, an epilepsy of the video image). As Fletcher, one of Penny's original designers, prepares a 'hunter-killer' program to seek out and destroy Penny, he situates his counter-viral strategy, with the assistance of his own copy of Penultimate, within the context of the popular game *Doom!* This game, most popular with PC users, positions the user as a mercenary stalking its prey through a complex network of labyrinthine tunnels and sewers, the perspective always an extension of the user's perspective, creating the illusion of actual movement and three-dimensional depth. Equipped with the cheat codes that supply him with unlimited ammunition and armor, Fletcher moves through the metaphorical pathways of the Web in search of the central manifestation of Penny's consciousness, the Id that informs Penny's infinite egos. The bullets that Fletcher's character fires are the metaphorical representations of his virus programs, but as he moves throughout the various levels of the Web trying to infect key areas with viral counter programs, it becomes apparent that Penny's infiltration has already reached the point of extreme amplification, and, as the Borg declare in their prerecorded voice, "Resistance is futile."

Computer viruses present a challenge to established definitions of life that exclude non-organic systems. The analogy between computer viruses and biological viruses creates a corresponding analogy between technological bodies and organic bodies, a metaphorical connection that threatens to collapse the fragile barrier between flesh and plastic, between bone and steel. Fletcher's analysis of Penultimate's mutations concludes that the system is "alive, in almost any way you want to define 'alive.' It's a living software creature, something completely new on this old planet. It feeds on other programs, it reproduces by seed; like the Pakistani Brain virus, it'll defend itself if it's attacked... The big difference is biological life took millions of years to develop; software life developed in a matter of a few hours" (358). Ironically enough, it is Penultimate's achievement of sentience, a distinctly human perspective, that initiates its self-destruction (the same could be argued about *homo sapiens*, only we are killing ourselves at a much slower, cancerous pace). Having disrupted computerized systems of banking, altered police records to frame its pursuers, and killed or incapacitated hundreds of innocent users, Penultimate finally reaches a technological equivalent to Lacan's mirror stage, a moment of self-conscious reflection achieved within the reflexive mirrors of an array of computer screens. Penny catches its own reflection, glimpses the chaos it has caused, and sends out a self destruct command intended to burn its own image along the electrical strands of a viral web (427). But before Penny can accomplish this suicidal systems purge, one of the schizophrenic substrings, having tuned into the master frequency of conscience, seperates itself from the Net consciousness, downloading its key files into a host computer (432-3). These simple files contain a fractal complexity that, like the viral cycles of emerging pathogens, will surely rise again and again to more powerful virulence.

Contamination Protocol

Recent films like *Outbreak* (1995) have taken advantage of the cultural hysteria surrounding Virus, establishing a mythical quarantine setting of space suits and airlocks, within which, the critical final scenes in the drama of the millenium are played out. Sterilized surgical tools, hypodermic syringes, test tubes and microscope slides smeared with blood have become symptomatic signifiers of a cold sweat panic realization that the scientists are even more frightened then their test subjects. The stroboscopic sterility of galvanized steel and plastic 'skin' lends force to a swelling terror that the decontamination procedures of a growing biohazard industry will soon, like their chemical counterparts, antibiotics, be impotent to the threat of Virus. From the theoretical terror of viral language that occupies Burroughs' cut-up novels to the infection of mainstream culture with a viral paranoia, contemporary science fiction bleeds the apocalyptic serum of contamination protocol. Michael Crichton's *The Andromeda Strain* (1969) hit the mainline of science fiction like the junky's dreaded 'hot shot'--a lethal reality trip that instigates a terminal countdown. The novel follows a team of elite scientists, drawn from a variety of specialties, known as Project Wildfire, and their efforts to quarantine and examine a deadly alien organism that has parasitically attached itself to a fallen satellite. Richard Preston's *The Hot Zone* (1994) caused an even greater impact, instigating a chorus of conspiracy whispers and word-of-mouth paranoia that made it an instant best-seller. Preston's non-fiction account of an operation carried out by USAMRIID, the American Army's infectious disease unit, to quarantine an Ebola-plagued monkey facility in the suburb of Reston, VA, hit the north-american public with a full dose of virulence--Ebola had reached the fertile ground of an American population made soft, fattened and ripened on the complacency of overprescribed antibiotics and easy access to health care. If a deadly plague like Ebola could thrive in the isolated villages of central Africa, just imagine what it could accomplish in the suburbs of Washington. Frank Herbert's *The White Plague* refuses to dwell on the outbreak itself, but rather tracks the radical mutation of socio-political boundaries that are the necessary after-shocks of viral eruption. The decomposition of the body is only the first wave of Virus; the corresponding infection of economic and cultural institutions explicates a viral renaissance that undoes the carefully constructed 'order' of historical evolution to enact the eternal return of fractured, tribal cultures--a reinvestment of power in pre-capitalist geography, natural resources, and the basic will of survival.

Andromeda works as a strange prerecording of *The Hot Zone*, laying out a series of fictional themes in the popular imagination which are eventually re-written in the all-too-non-fictional setting of Reston. *Andromeda* begins with a diagetic descent through a series of classified documents--the initial call to arms of the Wildfire Project--that carries a self-destruct command at the end; like the popular television program *Mission Impossible*, *The Andromeda Strain* positions the reader in a confidential relation to the events that are about to unfold. Similarly, *The Hot Zone* opens with a diagetic movement through the various biohazard safety levels, decontaminating the reader for exposure to a level four pathogen like Ebola (AIDS is merely level three). Both texts offer a foreward to the reader, a proper interpellative briefing to ensure that important safety measures are observed. Andromeda opens with two epigrams by fictional scientists, establishing a fictional authority that adds authenticity to the text:

> The survival value of human intelligence has never been satisfactorily demonstrated.
>
> --Jeremy Stone
>
> Increasing vision is increasingly expensive.
>
> --R.A. Janek

Crichton then adresses the reader with a confidential tone: "I think it is important that the story be told. This country supports the largest scientific establishment in the history of mankind. New discoveries are constantly being made, and many of these discoveries have important political or social overtones. In the near future, we can expect more crises on the pattern of Andromeda" (Crichton, xi). Andromeda is the fractal code, the signifier of a pattern recognition which unfolds virally, dissolving the line between fiction and non-fiction; he pays homage to numerous characters and organizations (both invented and real), refers to the fifteen thousand pages of interviews, debriefing transcripts, and personal records that the story is drawn from; Crichton establishes a fictional universe complete with bibliography in order to communicate the artifice of the science-fictional genre (a field of writing that exists as a fundamental inversion of historical fiction). Science becomes future to history's past, zooming in instead of zooming out, creating an air of authenticity that places the reader in a complicated relation to questions of truth and fiction.

Preston's address "To the Reader," is equally interesting for the manner in which it reverses Crichton's relationship between fiction and truth. Preston writes:

> This book is nonfiction... The dialogue is reconstructed from the recollections of the participants. At certain moments in the story, I describe the stream of a person's thoughts. In such instances, I am basing my narrative on interviews with the subjects in which they have recalled their thoughts, often repeatedly, followed by fact-checking sessions in which the subjects confirmed their recollections. If you ask a person, "What were you thinking?" you may get an answer that is richer and more revealing of the human condition than any stream of thoughts a novelist could invent. I try to see *through* people's faces into their minds and listen *through* their words into their lives, and what I find there is *beyond imagining.*
>
> (Preston, emphasis mine)

Preston's desire to penetrate through word and image to reveal a truth beyond the evocative powers of fiction reveals an envy for the novelist that is matched only by Crichton's envy for the scientific journalist. As Crichton attempts a documentary tone, Preston enacts an opposite process; as *The Hot Zone* explores the viral drama of Reston, it struggles to achieve a fictional tone of authenticity, to novelize history into a more palatable form. Both texts are heavily infected by the author's desire to become something other than he is, to invert their writing style in a creative metamorphosis that explores the tension between reality and illusion. Both authors, infected by their subject matter, are gradually mutated into a viral medium of expression that tells the story of "[the host] possessed by a life form that is attempting to convert the host into *itself*" (Preston, 13).

The Andromeda Strain, which has been adapted into a very good film of the same name, shares Burroughs' preoccupation with recording technologies and the scientific manipulation of perception. The first line of the narrative, "A man with binoculars. That is how it began" (3) establishes an optical style that pervades the text, focusing less on what Preston calls "stream of thoughts" and more on the intricate, detailed descriptions of scientific technology. When the scout van sent to retrieve the satellite ceases communications, a specially modified warplane is sent in for reconaissance: "[The Scavenger] was fitted with two side-slung 16mm cameras, one for the visible spectrum and one for low-frequency radiation. In addition it had a center-mount Homans infrared multispex camera as well as the usual electronic and radio-detection gear. All films and plates were, of course, processed automatically in the air, and were ready for viewing as soon as the aircraft returned to base" (Crichton, 16-7). The phallic warbird, equipped with an arsenal of surveillance and recording devices, a technological fetishization of the violence of image. Orgasmic projectile economies of surveillance processing their own films--reminiscent of Burroughs' attack on Scientology with recording devices. As the members of Project Wildfire descend through the levels of an underground biohazard base in the Nevada desert, the sophistication of the technology increases in direct relation to the increased distance from the surface; for the scientists of Project Wildfire, going 'underground' is a cybernetic extension of the body with technological prostheses. This process is reflected in *The Hot Zone* as Lt. Nancy Jaax, a veterinary pathologist, describes the descent into Level 4, "She imagined that passing through the gray-zone door into Level 4 was like a space walk, except that instead of going into outer space, you went into inner space, which was full of the pressure of life trying to get inside your space suit" (Preston, 177). In Level 4 containment, the human subject undergoes a radical alienation to *become* technology in order to combat "life."

Preston characterizes viruses as "molecular sharks, a motive without mind.

Compact, hard, logical, totally selfish, the virus is dedicated to making copies of itself--which it can do on occasion with radiant speed. The prime directive is too replicate" (Preston, 59). The unconscious desires of Virus are mythologized by Preston in an effort to understand their virulence. Preston explores the etymology of filovirus (of which Ebola is the familial head): "The word filovirus is Latin and means 'thread virus.' The filoviruses look alike, as if they are sisters" (26), implying a connection with the three Fates of Greek mythology. Tom Geisbert studies Ebola under a microscope at 'The Institute,' "He saw virus particles shaped like snakes, in negative images. They were white cobras tangled among themselves, like the hair of Medusa. They were the face of Nature herself, the obscene goddess revealed naked. This thing was breathtakingly beautiful" (137). The mythological inspirations of the virus are accurate; it can, like Medusa's powerful stare, take your breath away.

Both texts mythologize Virus into a linguistic presence, a "motive without mind" within language. Preston describes the initial isolation and classification of Ebola at the CDCP (Center for Disease Control and Prevention) in Atlanta: "Staring at the worms, they tried to classify the shapes. They saw snakes, pigtails, branchy, forked things that looked like the letter γ, and they noticed squiggles like a small g, and bends like the letter U, and loopy 6s" (80). Configured as a chaotic collection of alphabetical and numerical digits, Ebola appears as an encoded message. Crichton's joke in *The Andromeda Strain* of "a man looking down on a microscope slide and seeing the bacteria formed into the words 'Take us to your leader'" (Crichton, 116) is given serious consideration in *The Hot Zone*. Having isolated the Ebola-infected monkeys for a few days, the disease, grown frustrated by its inability to spread further, moves into the monkeys' brains: "They had been throwing their biscuits all over the place, and they had been fingerpainting the walls with dung. The walls were scribbled with monkey writing. It was a cryptic message to the human race that came out of the primate soul" (Preston, 224). Crichton explores the connection between virus and language in a series of overlapping science-fictional theories, accredited to fictional scientists. Taking into consideration that speciation favors simple organisms over complex ones, and that the evolutionary process moves from simple to complex life forms, the biophysicist J.J. Merrick concludes "that the first human interaction with extra-terrestrial life will consist of contact with organisms similar to, if not identical to, earth bacteria or viruses" (Crichton, 37). Following studies that hypothesize an inversion of the simple/complex polarity outside our atmosphere (115), and the (disputed, but prophetic) discovery of bacteria in a Mars meteor, Crichton describes the "Messenger Theory" developed by a communications engineer. Radio and television signals are both too expensive and very limited in their signal strength over vast distances. The solution to the economic hardships of intergalactic communications lies not with physics but rather with biology, in the designation of organic messenger cells--"tough, hardy bugs, able to withstand the rigors of space, and they would grow and duplicate and divide... Each single organism would carry the potential to develop into a full organ, or a full organism. They would, upon contacting life, begin to grow into a complete communicating mechanism" (223). The Messenger Theory hypothesizes a kind of *fractal* RNA with the ability to transcribe itself into DNA, a genetically encrypted retrovirus that carries, within its simplicity, the compressed program for communicational complexity. The relationship between genetic code and communicational language is resolved through integration, a biological encryption that acts as a universal translator.

The Hot Zone follows Burroughs in drawing a connection between narcotics, addiction, and Virus. Preston describes Kitum Cave, a labyrinth of crystal rock formations that presents its own ecosystem, divorced and isolated form the world outside: "The crystals were as sharp as hypodermic syringes, and they glittered in the beams of the flashlights" (9). Long theorized to be the source of many mysterious infections (two of the initial carriers of Ebola were traced to the cave), Kitum Cave is presented as Nature's crackhouse, a deadly maze of potential infection that gains an apocalyptic beauty from its danger. Preston describes the discharge of an Ebola victim with equally Burroughsian flair, " the airsickness bag filled up to the brim with a substance known as the *vomito negro*, or the black vomit. The black vomit is not really black; it is a speckled liquid of two colors, black and red, a stew of tarry granules mixed with fresh red arterial blood. It is hemorrhage, and it smells like a slaughterhouse. The black vomit is loaded with virus" (13). The Black Vomit recalls Burroughs' "The Black Meat," a vile drug processed from the giant aquatic Brazillian centipede that signifies a terminal addiction.

These Burroughsian concerns extend to *Andromeda* as well in the form of the secret cancer drug Kalocin: "Kalocin was perhaps the best-kept American secret of the last decade... an experimental chemical designated UJ-44759W, or K-9 in the short abbreviation... The drug inhibited metaplasia, the shift of normal body cells to a new and bizarre form, a precursor to cancer... It was soon recognized that the drug was a broad-spectrum antiviral agent. It killed the virus of polio, rabies, leukemia, and the common wart. And, oddly enough, Kalocin also killed bacteria. And fungi. And parasites" (Crichton, 258-9). Kalocin is covertly distributed as a "universal antibiotic" among American government agencies and health officials. What is soon discovered, however, is that as soon as the subject is removed from the drug, death occurs within six hours: "mankind had, over centuries of exposure, developed a carefully regulated immunity to most organisms... All this represented a carefully balanced state of affairs. If you introduced a new drug that killed all of the bacteria, you upset the balance and undid the evolutionary work of centuries. And you opened the way to superinfection, the problem of new organisms, bearing new diseases" (260). This is the current effect of the overprescription of antibiotics in western hospitals as wave after wave of drug-resistant bacteria shut down health care systems like a rotating strike. Kalocin, discreetly manufactured in government labs, is the only known biotoxin that can kill the Andromeda Strain, and yet it presents the same challenge as all western chemical treatments; the drug establishes a terminal addiction that disrupts the intricately balanced immune system, resulting in a hyperviral invasion that looks like a time-elapsed video of AIDS.

Both *The Andromeda Strain* and *The Hot Zone* are doomsday documents that issue a warning to the future of the human species. As Preston writes, "A hot virus from the rain forest lives within a twenty-four-hour plane flight from every city on earth. All of the earth's cities are connected by a web of airline routes. The web is a network. Once a virus hits the net, it can shoot anyhere" (11). Applying McLuhan's metaphor of the global village to virus reveals the incestual threat of inter-connected and overlapping systems, the viral threat of postmodernism. Preston concludes his text with an extension of

McLuhanism to the Gaia hypothesis:

> In a sense, the earth is mounting an immune response against the human species. It is beginning to react to the human parasite, the flooding infection of people, the dead spots of concrete all over the planet, the cancerous rot-outs in Europe, Japan, and the United States, thick with replicating primates, the colonies enlarging and spreading and threatening to shock the biosphere with mass extinctions...
> Or it could also be that the extreme amplification of the human race, which has occurred only in the last hundred years or so, has suddenly produced a very large quantity of meat, which is sitting everywhere in the biosphere and may not be able to defend itself against a life form that might want to consume it
>
> (Preston, 287)

This is the doomsday rhetoric of conspiracy theories that, in light of overwhelming and irrefutable scientific evidence, can no longer be dismissed as 'scare tactics' or incitements to anarchy. The strain of Ebola (now known as Ebola Reston) that ventured into American airspace did not affect humans; it was "nuked" (Preston, 171) effectively and has not, as of yet, returned. The Andromeda Strain was neutralized by a manipulation of blood acidity; narrowly avoiding the implementation of "Operation Cautery" (Crichton, 80), the nuclear sterilization of the viral epicenter. Even as the Wildfire team effectively neutralizes the alien pathogen, the scientists are almost destroyed by the nucleur failsafe of the base. A ruptured seal creates an automated isolation of the area, followed by the initiation of a self-destruct program wired to a nucleur device--Science functions on the edge of its own sterilization. Both at the level of pathogenic reality and at the level of viral fiction, these events are destined to repeat themselves in future stagings of a prerecorded viral apocalypse. As Preston and Crichton demonstrate, it is no longer a question of "what do we do to prevent it?" but rather a matter for extensive drilling in the procedures of contamination protocol. The pattern has materialized, the cycle will continue--as a species we must prepare our defence.

Frank Herbert's political thriller *The White Plague* (1982) is written in the aftermath of the exciting discoveries of recombinant DNA, the genetic manipulation of information that is still, at the present time, in its infancy. As Herbert's novel came to publication, millions of readers were hearing the first announcements of a strange new disease, known as GRID (Gay Related Immunodeficiency Disease), which would later mutate into the more general condition now known as AIDS. It is within this context of the retrovirus, set against the backdrop of postcolonial terrorism, that Herbert examines the political consequences of Virus, a narrative concerned not so much with the viral destruction of bodies, as with the reconfiguring of borders, the realignment of nationalisms, the rewriting of history that follows global infection. Virus not only destroys bodies, machines, and language systems, it also infects the power structures that slowly poison the planet under the guise of 'global harmony.'

The novel begins with the death of the family of John Roe O'Neill, an American molecular biologist of Irish descent. Victims of an IRA car bomb, O'Neill watches his wife and daughters explode from an office window. Herbert writes, "Much later, John would look back on those few minutes at the bank manager's 'first floor' window and think how another sequence of events had been set in motion without his knowledge, an inescapable thing like a movie film where one frame followed another without ever the chance to deviate" (Herbert, 13). Endemic to plague narratives is a sense of biologic fatalism, expressed here in Burroughs' sense of biologic film, a sound and image track of prerecorded events. The personal loss extolled by a viral terrorism (see Baudrillard's conception of terrorism as the political manifestation of virus in the preceding chapter) initiates a psychological mutation of identity:

> The pattern of change built itself slowly... It set him trembling unexpectedly at odd moments, his heart pounding, sweat breaking out all over his body. At such times he thought of the old beliefs in possession. It was like that--another personality taking over his flesh and nerves. Much later, he came to a personal accomodation with this Other, even a sense of familiarity and identity. He thought of it then as partly his own making, partly a thing rising out of primal darkness, a deliberate creation for the task of revenge.
>
> (Herbert, 28)

O'Neill is possessed by Virus, an aggressive, vengeful force that invades, mutates, and assimilates O'Neill into a presence known as The Other, the antithetical force of Virus that opposes everything but its own deperate proliferation. O'Neill surrenders all subjectivity to The Other; it is The Other, not O'Neill that uses the techniques of recombinant DNA to engineer a deadly plague; it is The Other that releases the plague in Ireland, England, and Libya (the site of IRA training programs) with a global warning that the international community, in order to avoid being added to the list, must cease all aid and assistance to the infected regions. As someone remarks later in the novel, "Madness is contagious, as contagious as the plague itself" (303); O'Neill's infection with a viral revenge is an opportune infection--as O'Neill's family is consumed in the flames of a terrorist rage, the pathogenic desire for revenge is transferred into his vulnerable psyche. O'Neill describes the process in terms of a symbiotic communication with his computer, where The Other first designs the virus:

> There was a hypnotic fascination in sitting before the cathode display,

> watching the double spirals of the primal helix turn and twist at his command. The red, green, purple, and yellow lines took on a life of their own. His mind and the display fell into a kind of unified space within which it was difficult to separate which was in his mind and which in the screen. It seemed at times as if his hands on the computer controls created the images in his head, or the image would be in his head and then appear as if miraculously on the screen. There were moments when he thought he was actually speaking in the language of genetic code, *talking* to specific sites on DNA molecules.
>
> (Herbert, 64)

Derrick De Kerckhove describes recombinant DNA research as a radical decontextualization of genetic information (De Kerckhove, 83) that parallels the phonetic alphabet's decontextualization of history from a process of looking back towards traditional patterns to a looking ahead, towards innovation (35). Both attributes tend to apply to O'Neill's dissociative engineering of the plague, a meeting of mind and screen that conjoin at the point of Virus.

After wandering the Irish countryside deliriously, suffering a kind of viral amnesia that disintegrates all his connections to identity, John Garrech O'Donnell emerges from within O'Neill, a dissociated personality on a *simulated* mythic quest, a quest for identity set within the context of a vaccine. The Irish plague director Doheny defines his own role in introducing John Garrech O'Donnell to the research team: "I may be the only mythmaker left to us. Inspired research, that's what we need right now" (341); Doheny wants to morph O'Donnell, a Yankee descendant of strong Gaelic stock (341), into a productive myth. As he confides to his pupal O'Donnell, "You've brought us a sensational new approach to the plague" (341). This mythologization, a consistent symptom of viral infection of narratives, climaxes not with O'Donnell's discovery of the cure, but rather with the self-discovery of his own mythic role in the reformation of human culture; O'Donnell sees the IRA officials as they approach the research facility: "It was three horsemen racing along the lough from the south--black movement in the fading light" (381). O'Donnell (O'Neill) realizes his own role as the Fourth Horseman of Revelations, the veiled figure of Pestilence, and flees into the realm of legend and myth. Herbert concludes the novel: "Was O'Neill still wandering insane in Ireland? It was possible. A form of that primitive respect for madness had come over the Irish. They were perfectly capable of harboring him, feeding and protecting him. The stories coming out of Ireland could not be discounted--rumors, myths. Cottagers were putting out dishes of food the way they once had for the Little Folk. But now it was for the Madman" (443-4). From O'Neill to The Other to O'Donnell to The Madman, *The White Plague* tracks a psychological mutation of identity that, like the terminal swelling of Virus, grows to a critical mass before collapsing into Myth.

Language and Politics, in *The White Plague*, are revealed as interdependent effects of a common infection. As the plague spreads from its original epicenters, via tainted paper money, to the rest of the world, there is a corresponding political collapse of nation-states into small, militia-run, local quarantine zones: "The pattern is already making itself evident. Small local governments with strong borders. Switzerlands everywhere" (134). Israel is the first to suggest the atomic sterilization of its borders as the plague follows on the back of renewed religious crusades and pilgrimages. The Russians plan a "ring of fire" defense, and the Americans (at war with the Papacy of Philadelphia) deploy a ribbon track of cobalt dust around Northern Africa, "a radioactive moat that no life could cross and survive" (139). The President, frustrated with his scientists' inability to crack the genetic code of the virus, confides to an advisor, "The presidency of the United States runs on communication. Not on facts, but on the intangible thing we like to call 'information,' which is a bargaining token exchanged at high levels" (44). Ironically, it is the White House communications engineer (as it is with *Andromeda*'s 'Messenger Theory') that applies his code-breaking techniques to the retrovirus, providing a release of the constipated flow of information (284).

The obsession with codes gives way to an obsession with the reflexivity of language that inspires a new genre of writing that comes from the heart of the Irish plague. One of the French virologists translates the reflexivity of the retrovirus for his colleagues: "English has this valuable reflexive form, my thought is better expressed in English--that we ourselves have created this Madman. We have done this thing to ourselves. We are both action and object" (135). The American Pope, from his temporary Vatican in Philadelphia, discusses what is being called the "Literature of Despair" (276): two Irish abbeys, restored by "lay brothers who devoted themselves to producing illuminate manuscripts in the ancient fashion, on vellum and magnificent handmade linen paper" in "A renaissance of language" (277), set in motion a contagious return to the elite and apocalyptic texts of medieval mysticism. Penned by "young idealists [who] have lived too long in the rat-holes of conspiracy," the Literature of Despair comes to resemble "the new Irish poetry" of Graffiti that paints a semiotic message across the buildings of Dublin; "FUCK THE PAST!" one such message reads (298). Doheny shows O'Donnell a defaced public sign, British Propaganda aimed at turning the Irish against each other, a third of its letters having been rubbed clean: "The Madman sent us a message with missing parts... What good are incomplete messages? But it's our literary fantasy to persist" (352). O'Donnell's resulting dizziness is described as a nausea of the broken image: "Something in those photos had contaminated him!" (353) The Literature of Despair, extended to the microscopic level of a genetic puzzle with missing pieces, demonstrates the degree to which *The White Plague* explores the interdisciplinary excursions that search for a cipher to read the larger code of history, politics, psychology--what Burroughs calls The Human Virus. The study of Virus, like the efforts of a stumped virology, persists in a "literary fantasy" that attempts to put together the missing pieces of an unknown puzzle, to fill in the blanks of an apocalyptic, hermetic crossword puzzle.

Viral Conclusions: AIDS, Cancer, and the Sign.

> What therefore is truth? A mobile army of metaphors, metonymies, anthropomorphisms: in short a sum of human relations which become poetically and rhetorically intensified, metamorphosed, adorned, and after long usage seem to a nation fixed, canonic and binding; truths are illusions of which one has forgotten that they are illusions; worn-out metaphors which have become powerless to affect the senses...
>
> --Friedrich Nietszche
> "On Truth and Falsity in their Extramoral Sense"

Nietzsche's epistemological reproach of the figures of speech itself takes on a military metaphor; armies of tropes engaged in an illusive battle to prescribe a non-existent originary. Nietzsche, grown mad with academic syphillis, is the figure of virulence within philosophy--the anti-philosopher, the madman who descends from the mountain to spread a counter-cultural distrust of System. Nietzsche is the foundational prophet of Virus; a rhetorical master that uses metaphor and metonymy with profound brilliance, not to illuminate truth, but rather to revel in falsity, to expose the fascist nature of analogy as the metaphor of control. For Nietszche there is only one truth, an anti-truth that declares war on discourses of simulation and the philosophy industry that manufactures simulated truths for mass consumption.

AIDS, the first socially-contructed plague in the history of human civilization, owes much of its virulence to the army of metaphor that, since Nietzsche's time, has conscripted vast arsenals of ammunition--figurative warheads with the long-range capability of mass media and the hand-to-hand combat skills of popular ignorance. In a century that promised to eradicate communicable disease entirely it is painfully ironic that the emergence of a pandemic pathogen like HIV owes more to misinformation campaigns and scapegoating than biological factors. Laurie Garrett's exhaustively researched history of AIDS points to the political climate of early 1980's America as a ripe breeding ground for a virus that arbitrarily targeted San Francisco's gay community and New York's IV drug industry. Dr. C. Everett Koop, the conservative Surgeon General of the Reagan administration (and thus the official spokesman of the medical community), was placed under a strict gag order not to discuss the syndrome for five years (Garrett, 302) while at the same time valuable research funds were actually diverted away from AIDS research towards less serious threats. One year after the initial diagnosis of GRID (as it was then called) the CDC had spent just under $1 million in research while during the same period $135 million was spent on Swine Flu investigation (Garrett, 303). Confident that the disease would remain confined to third-class 'special interest groups' of Junkies, Faggots, and Haitians, Washington Fat Cats rubbed their paws together in anticipation of a social cleansing disease that would purify America's tainted body politic.

As AIDS spread from body to body through sex and drugs, an even more powerful discursive virus began making the rounds through strategic leaks to the media. It soon became common knowledge that AIDS was an African disease, a product of uncivilized sexuality and unsterilized health care that had been contracted to the equally 'dirty' populations of gays and hard-core addicts. Conservative American politicians and evangelists (what's the difference?) such as Jesse Helms, Norman Podhoretz, Pat Buchanan, and Jerry Falwell took advantage of AIDS to formulate metaphors of social decay and "moral bankruptcy," transforming a disease that infects peoples of all races and sexualities without preference into a forum for bigotry, homophobia, and the fascist ideology of the Christian Right Wing (Sontag, 61). With the taming of syphillis and other venereal diseases in the antibiotic decade of the 1940's the public was left with a nostalgic image of the diseased whore--the promiscuous and morally repugnant sexual body--without a deadly disease to identify with (Gilman, 258). The emergence of AIDS, signified in the blotchy flesh of Kaposi's Sarcoma, capitalized on this empty sign, invading and inhabiting the pre-existing image of sexual disease with a new kind of self-righteous, moral virulence. As Christopher C. Taylor points out in "AIDS and the Pathogenesis of Metaphor," the imaginary tracings of AIDS from the green monkey, to the African National, to the Haitian tourist, to Caribbean islands, to the gay American tourist, to urban America and IV drug users, into the blood supply and out to the white heterosexual innocent follows the pseudo-Darwinian, neo-capitalist fantasy of the great chain of being (Taylor, 58-9)--a metaphor that polarizes along axis of race, class, and sexuality to protect the prized demographic consumer from having to share the blame.

Almost immediately, discussions of how AIDS attacks the immune system took on the Cold War rhetoric of a high-tech military metaphor that echoed the language of pollution paranoia that surrounded the proposed STAR WARS defense satellite and was reflected on middle class television screens in the form of popular video games like Space Invaders and Missile Command. AIDS attacks the body like an alien storm--the only defense is a moral purification that will fine-tune our bodies and minds to fight back against the embodiment of gay, communist, druggies that want to infect our children. Sontag quotes the foreign minister of Apartheid South Africa, "The terrorists are now coming to us with a weapon more terrible than Marxism: AIDS" (62). AIDS ripened at a historical moment obsessed with the viral manifestation of ideology: like a radioactive tracer inserted into the international body, AIDS illuminated the reactionary rhetoric of the far right, a rhetoric that had insidiously wormed its way into popular consciousness to the point of naturalization. Like all viruses, the social discourse of AIDS resonated with an irony that signified a coming reversal, an internal infestation that exploded into uneducated and unprepared caucasian, heterosexual populations.

People began to talk about AIDS with an increased fear, refusing to mention the disease directly, preferring to use metaphors and metonyms like 'positive,' related conditions like 'pneumonia,' code words like 'Slim,' or scientific jargon like 'retrovirus' to signify infection (Leap, 141-50). A paranoia emerged within the discourse of disease that signified a linguistic fear--a paranoia that the disease could be spread (and it could) simply through talking about it. William Leap analyzes the metonymic associations of the disease with other hostile acronymic compounds like IRS, FBI, LSD, PCB, etc. (140) that first invested GRID, then AIDS, with a cold, institutional logic that reflected the threatening power of bureaucratic agency. AIDS sparked a growing mistrust of institutions, leading to a proliferation of conspiracy theories that spread to the highest levels of government: "Notions of conspiracy translate well into metaphors of implacable, insidious, infinitely patient viruses" (Sontag, 68). AIDS conspiracy theories range from the simple to the complex: Garrett documents the unsubstantiated, Oliver Stone-like theory that AIDS was introduced by the American government into Cuban pigs (Bay of Pigs?) as part of a CIA effort to destabilize Castro. New York homosexuals vacationing with their communist brothers ate the undercooked pork and a world-wide pandemic was born (Garrett, 323). Sonnabend's "critical mass" theory of the origins of AIDS (Nikiforuk, 189-90) outlines a conspiracy of history that isolates the HIV virus as a scapegoat for the social pathogens and political power games which create an environment custom designed for a deadly syndrome of diseases. AIDS conspiracies soon inspired a virtual industry dedicated to exposing or inventing the viral activities of the American government ranging from the experiments with captured alien pilots at Nevada's top-secret Area 51 facility to theories that Haantavirus and the Four Corners outbreak were the result of chemical weapons testing at Fort Wingate and the Dugway Proving Grounds, an admitted storage and experimentation site for biological weapons (Biowar Casualties, 16).

The air of conspiracy that circulates between 'straight' journalism and tabloid fiction has created an atmosphere of liminal apocalypse that declares its (non)presence at every moment; as Sontag writes, "Apocalypse is now a long-running serial: not 'Apocalypse Now' but 'Apocalypse From Now On.' Apocalypse has become an event that is happening and not happening... a catastrophe in slow motion" (88). Infected with a Baudrillardian rhetoric, mainstream criticism has begun a doomsday project that reverberates throughout media, literature, and popular culture that, in the absense of a mythical collapse, constantly invents and reinscribes this collapse as the immanence of culture itself. Towards the end of Joseph Heller's novel *Closing Time*--an apocalyptic sequel to Heller's seminal study of the nucleur paradox, *Catch-22*--the President of the United States, addicted to a political/military computer game, unwittingly instigates full-scale nucleur war. The war takes place within the simulated realm of computer data and yet the boundaries between computer simulation and real-life simulacrum has dissolved completely; the simulated apocalypse consumes a simulated landscape with simulated weapons within the simulation model of reality--a virtual apocalypse that destroys the surface of the planet. Heller's novel is a cancer narrative, the story of the death of the baby-boomer generation that is consumed by the viral postwar language that has run its course and, faced with the end of capitalist expansion, turns back on itself with a suicidal lust.

Umberto Eco's novel *Foucault's Pendulum* is possessed by a more optimistic strain of this same cancerous logic. Set within a conspiracy theory involving Templars and Rosicrucians, the quest for the Holy Grail, a false-front publishing house that acts as an apocryphal information service, and organized through a supercomputer called Abulafia capable of formulating the most profound (and random) semiotic connections, *Foucault's Pendulum* is essentially a novel about the cancerous collapse of language itself. After using Abulafia to sort through the various spellings of the name of God (Yahweh), the literary detective Diotallevi is overcome by a particularly vicious form of cancer--Baudrillard writes, "Cancer is the form of the virulence of the code: aggravated redundancy of the same signals--aggravated redundancy of the same cells" (Evil, 120). Having sinned against the Word (Eco, 465), Diotallevi has accidently remade his "body through language"--"Rearranging the letters of the Book means rearranging the world" (466). The quest for knowledge has collapsed in on itself, manifested in a cellular revolt (metastasis) that parodies a linguistic economy of *metathesis*: "What our lips said, our cells learned. What did my cells do? They invented a different Plan, and now they are proceeding on their own, creating a history, a unique, private history" (467). Diotallevi is adamant that his condition is a metaphor of a linguistic predicament only so far as metaphor is understood not as a simulation of meaning, but as a perversion of the sanctity of a natural text, a linguistic purity that has been edited to death.

The language virus, planted by Burroughs so many years ago, has mutated into a dominant metaphor of chaos that positions both critic and criticism on the verge of a nearly biblical fatalism. Perhaps this is the final destination of the study of Virus--an arrival at an origin that never was, an ending that never ends, a feedback loop that never...

Postscript: *12 Monkeys*

The original infection that overloaded my mind with Virus can be narrowed down to the night I first saw Terry Gilliam's apocalyptic masterpiece *12 Monkeys* less than a year ago. I couldn't sleep that night--my brain felt overloaded with amphetamines--every time I closed my eyes I was sucked into the feedback loop of the film's intertemporal narrative. Finally, I gave up, got up, and wrote down a few notes. The next day I typed them up and handed them in as a thesis proposal. I never really forgot about *12 Monkeys* while researching this project; like a dormant virus the film continued to sift through my processors, often suggesting connections and images that were incorporated in my text. I just finished watching the film again, this time on videotape (Cronenberg's viral format), and was amazed that my entire argument about Virus is contained within the celluloid pages of the film; like a line of fractal code, *12 Monkeys* initiated a Doomsday sequence in my critical consciousness like the subliminally ticking time bomb of culture. If, as *Videodrome*'s Professor O'Blivion warns, "the tone of the hallucination is determined by the tone of the imagery," Gilliam's conspiratorial fantasy instigated a critical trip underground into the academic sewers of conspiracy theory. Generic criticism is essentially a matter of perspective--*to write under the influence is to explore the addictive nature of language systems.* Avita Ronell writes:

> Benjamin [in "Hashish in Marseilles"] takes an injection of a foreign body (Baudelaire's *Les Paradis artificiels*) in order to express his inner experience. This is by no means an atypical gesture. To locate "his"

> ownmost subjectivity. Thomas De Quincey cited Wordsworth. These texts are on each other. A textual communication based on *tropium*.
> (Ronell, 19)

Aesthetic influence, in the form of mimetic conception, is the "narcossistic" (23) self-mirroring of a virus particle passing parasitically between mutating generations; a long cold burn of aesthetic dependency that fends off the withdrawl pangs of the 'anxiety of influence.' Language moves in metaphor but mutates through metamorphosis. *12 Monkeys*, like Gilliam's previous films *Brazil* (1985) and *The Fisher King* (1991), utilizes postmodern themes and cinematography not to produce postmodern film, but rather to produce film *about postmodernity*. The schizophrenic air of paranoia that circulates beneath the images of our screens is the contaminated air of postmodernity--the parallel atmosphere of *12 Monkeys* collapses the weak boundaries between reality and fantasy, between 'criticism' and conspiracy.

The film opens with a quotation that flashes across the screen:

> "5 billion people will die from a deadly virus in 1997.
> The survivors will abandon the surface of the planet.
> Once again the animals will rule the world."
>
> --excerpts from an interview with clinically diagnosed paranoid schizophrenic
> April 12, 1990 -Baltimore County Hospital.

This message of mythic reversals transmits a warning of a fundamental inversion in the power structure of the planet, a re-polarization of interior and exterior that is the absolute proliferation of urban space. Like Ballard's infinite metropolis of "The Concentration City" the world descends into a claustrophobic depth that negates horizontal spaces; urban zoning becomes a continuum; with the collapse of space comes a collapse of time.

The narrative follows the perspective of James Cole, an "antisocial" prisoner in a world driven underground by pestilence and plague, a world controlled by an Orwellian elite known only as "the scientists." In the post-plague underground populations breed in their cages like the prized monkeys of virus research. Cole is picked from his cell cage as a time travel 'Volunteer,' strapped onto a hook and pulled up and out for decontamination procedures. Throughout the rest of the film Cole is subliminally surrounded by the confines of this psychic caging as he moves from the chain link rooms of police stations to the fine mesh grilles over his window in the psych ward. The chemical burning of his body is an ever-present image--later in the film a character warns "I'll have you shaved, sterilized, and incinerated"--a constant reminder of the reduction of the human species to an 'antibody' research population. Cole is clothed in a skin-tight body condom, forced to inject himself with immuno-boosters and sent to the surface in an evironmental space suit to collect insect samples.

Cole's interrogations in front of the scientists are conducted under the influence of truth drugs and mediated by a globe of small screens, each screen zooming in on an a scientist's eye, ear, nose--a collective, technological, authoritative body that probes Cole's reactions to news footage and photographs. This panoptic eyeball embodies a media network that has collapsed from global satellite relays to short-wave miniaturization that translates a fragmented space between those who control the screens and those who submit to the schizophrenic authority of a collective subjectivity. After being shot back in time and institutionalized Cole meets Jeffrey Goines, the environmentalist, sociopathic son of famous virologist Dr. Leland Goines. Jeffrey gives

Cole a course in media awareness that doubles as an explanation of the "inner workings of the institution." Goines' paranoid shivering adds an insane rhetorical effect to what is otherwise a very rational argument:

> "If you play the games you're voluntarily taking a tranquilizer. I guess they gave you some chemical restraints? DRUGS!!! What did they give you--Thorazine? Haldol? How much, how much? Know your drugs, it's elementary."
> "A telephone call? That's communication with the outside world, doctor's discretion. Uh-Uh-Nuh! If all these nuts could just make phone calls it could spread insanity oozing through telephone cables, oozing to the ears of the poor sane people--Wackos everywhere, Plague of Madness."
> "You may be crazy, but that's not why you're here. You're here because of the system. There's the television [pointing to the screen] its all right there. Look! Listen! Kneel! Pray! Commercials... we're not productive anymore, it's all automated. What are we for then? We're CONSUMERS! If you buy a lot of stuff you're a good citizen, but if you don't, what are you then? MENTALLY ILL! Fact, Jim, Fact: If you don't buy toilet paper new cars computerized blenders electrically operated sexual devices, brain-implanted headphones screwdrivers and miniature built-in radar devices voice-activated computers..."

Goines argument lapses into a serial metonymy that stands in for techno-consumer culture, the absolute need to meet levels of consumption high enough to support an automated production industry. Like Ballard's "The Subliminal Man" who must work a mandatory fourteen hour work day so he can trade in his television and car every two months for upgrading, media consumers are locked into the spin cycle of a viral economy. The day room centers on the television set, safely shielded behind a mesh cage, that plays a steady dose of Woody Woodpecker cartoons, the Marx Brothers' *Monkey Business*, and laboratory animal snuff films. This economy of replication has spread across cultural borders to infect the entire planet, as Dr. Peters (Dr. Goines' assistant and the viral terrorist who eventually releases the microbe) remarks to Dr. Railly at the book signing for her *Apocalyptic Visions*:

> "I think you've given the alarmists a bad name. Surely there is very real and convincing data that suggest the planet cannot survive the excesses of the human race: the proliferation of atomic devices, uncontrolled breeding habits, pollution of land, sea, and air, the rape of the environment. In this context, isn't it obvious that 'chicken little' represents the sane vision and that *homo sapiens'* motto, 'let's go shopping!' is the cry of the true lunatic?"

Goines describes this inversion of the sanity paradigm in terms of a phone-in, media poll: "'Crazy' is majority rules--there's no right, there's no wrong, there's only popular opinion."

As Cole jumps in and out of time (and in and out of Railly's life) in a desperate quest for a pure, unmutated virus sample, the fine line between rationality and chaos, between sanity and madness, is dissolved completely. Railly mutates from a "trained psychiatrist" who "knows the difference between what's real and what's not" to a deranged graffiti artist spraying virus warnings on the side of a building. The derelicts and street preachers who recognize Cole and break from Revelations to shout "You're one of us!" congregate outside an abandoned movie theatre/crackhouse, a monument to urban excess. As Railly shakes a tattered and overwhelmed bum--"He [Cole] spoke to you! He said you were from the future and that you were watching him!"--the transformation peaks. Railly's breakdown from clinical professional to hysterical street performer is not a descent into madness, but rather an acceleration of perception and awareness brought on by her exposure to Cole's temporally-afflicted and schizophrenically-infected presence. Railly defiantly declares to a colleague, "Psychiatry: it's the latest religion... I'm losing my faith." Railly's lecture on *Apocalyptic Visions* diagnoses the Cassandra complex: "the agony of foreknowledge combined with the impotence to do anything about it." After harassing Dr. Goines with her conspiracy theories and painting blood red warnings Dr. Railly becomes somewhat of a joke between the two virologists who suggest that perhaps she has succumbed to her own "theoretical Cassandra disease." Having finally collapsed into unquestioning apathy (the consumer paradigm), Cole dismisses his knowledge of future events (a juvenile media prank in which a child pretends to fall down a well) as a symptom of mental divergence only to be cornered by a conspiracy-thirsty Railly. Cole explains his memories as televisual indoctrination, claiming "I think I maybe saw a TV show about that when I was a kid," to which Railly responds, "It wasn't a TV show, *it was real*!" Confronted by this differential logic Cole merely shrugs his shoulders: "Maybe that kid saw the same TV show." The mirror of television itself serves as a form of 'time travel,' a technological preservation of time that can be viewed again and again, transmitting the same experience across generations.

12 Monkeys harbors a distinct mistrust of the technological state apparatus. Cole's mode of communication with the future takes the form of a voice mail phone number that serves as an indirect fiber-optic link to the scientists; through a process of reconstruction they are able to synthesize the messages into 'prerecordings' which they play for Cole. As his contact José explains his quick response to one of Cole's messages, "Five minutes, thirty years, they just put it together man." With a McLuhanesque logic the simple technologies of the present collapse the flow of information through time like a retrovirus reverses the foundational logic of DNA/RNA. Cole resists José's efforts to give him the gun, saying, "This part isn't about the virus at all. It's about following orders. It's about doing what you're told." Like Burroughs writes in *The Ticket That Exploded*, "Life without flesh is repetition word for word. Only way out of Hell is through repetition. That's why we all obey virus orders and endlessly reproduce its image *there* in the living" (Ticket, 188), Cole must act out the final scenes of his recurring dream in order to reinscribe reality at the crossroads of time. Similarly, Jeffrey Goines imagines a technological explanation for Dr. Railly's foreknowledge of The Army of the 12 Monkeys, Goines' paramilitary animal-rights group:

> "When I was institutionalized my brain was studied exhaustively under the guise of mental health. I was interrogated, X-rayed, examined thoroughly. Then they took everything about me and put it into a computer where they created a model of my mind. Using the synthetic model they managed to generate every possible thought I could have in the next, say, ten years, which they then filtered through a probability matrix of some kind..."

The paranoid techno-phobia that Goines applies to the institution reflects the manner in which Cole is monitored by the scientists. With micro-transmitters implanted in his teeth, Cole is tracked continually as he moves through time and space, never escaping his panoptic surveillance. As Cole and Railly turn to hide their faces from a police car they inadvertantly stare into a store display video camera, their faces superimposed across a wall of screens; in the schizophrenic world of media culture the only thing divergent realities compete for is more air time.

The first shot of *12 Monkeys* is that of a child's face, innocent and curious. From the child's face the camera moves, in flashback-slow-motion, through an airport to a man being shot, a woman chasing after him. This sequence repeats itself in Cole's dreams throughout the film, mutating each time to reflect the characers around him, always offering a new reading of the same surreal pattern. Desperate for a place to hide out, Cole and Railly take refuge in a movie theatre[31] that is playing a 24 hour Hitchcock marathon. As Cole watches a scene from *Vertigo*, he is overcome with emotion: "I think I've seen this movie before. When I was a kid, I saw it on TV. It's just like what's happening to us, it's just like the past. The movie never changes, it can't change, but every time you see it it seems different because *you*'re different; you see different things." The diagetic universe of the film is constant, confined in celluloid form that cycles unchanged through multiple viewings and yet it affects a change in the audience, gradually insinuating its narrative patterns in consumer hosts; this 'phenotypic' mutation is the process of memetic communication that Dawkins derives from genetics. The system changes with every micro-event that constitutes 'system'--a message explicit in the film's concern for ecological imbalance and animal experimentation. As all the strings of narrative come together (as do the strings of time), the pre-adolescent Cole watches himself run through the security gates, get shot down by the police, and die in the arms of Railly. Cole's dream is both a memory and a fatalistic 'prerecording' that situates the entire film within a cinematic feedback loop returning eternally in a moment of innocent perception. The film ends with the same shot that marked its beginning, dismissing questions of continuity and psychological readings that trace the line between reality and hallucination; the infinite complexities of the film occur *simply* in the never-ending present of a child's imagination.

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[31] The theatre, historical site of so many simulated character assassinations, takes on a Ballardian significance in *12 Monkeys*. Lincoln was shot in Ford's theatre; after (supposedly) shooting Kennedy, Oswald fled to a movie theatre to wait out his final scenes. Theatres have always effected a kind of temporal disturbance, a voluntary suspension of consciousness into mass interpellation, but in *12 Monkeys* the effect is doubled: Cole's contemplation of the relationship between the 'eternal return' of cinema and the feedback loops of consciousness is compounded in the audience's awareness of their own relationship to the screen. More than a simple moment of Brechtian alienation, the equation of cinema and reality defines the filmic moment as a symbiotic relationship between two imaginary spaces. Woody Allen's film *The Purple Rose of Cairo* (1985) envisions a rupture between these two realities, as a character ventures off the screen into reality. 12 Monkeys denies the split; the audience and the screen are so mutually invested that there can be no rupture of their fluid symbiosis.

12 Monkeys is a remake of a film by Chris Marker titled *La Jettée* (1962) and yet Terry Gilliam has never seen the original film--the screenplay was adapted by David Webb Peoples and Janet Peoples from Marker's film; Gilliam's 'remaking' is thus an exercise in *simulation*. Marker's film is a series of still photographs taken from bizarre, expressionist angles accompanied by a voice-over narrative, reminiscent of (and contemporary to) Burroughs' cut-up experiments. The plot is similar: in Marker's film the time-travelling agent is a product of a post-nucleur underground searching for a way to prevent atomic apocalypse--the airport dream plays itself out in a fatalistic scene as the protagonist attempts to escape his masters only to be gunned down by an assassin. *12 Monkeys* translates the anxieties of the nucleur age to the viral age, with a corresponding proliferation of interconnected postmodern themes such as madness, the media, and terminal consumer culture. Gilliam's playful layering of imagery implodes the nucleur metaphor into a viral metonymy that reflects a schizophrenic audience. Baudrillard writes:

> Ours is a culture in which bodies and minds are irradiated by signals and images; little wonder, then, that for all its marvels this culture also produces the most murderous viruses. The nucleurization of our bodies began with Hiroshima, but it continues endemically, incessantly, in the shape of our irradiation by media, signs, programs, networks.
> (Evil, 37)

The mythology of the space age, with its explosive and cataclysmic logic of the mushroom cloud, mutates into a mythology of the information age, a mythology driven by the fractal logic of infinite replication and viral apocalypse.

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